

Safety Data Sheet

Lysis Buffer C

Section 1. Identification of the substance/mixture and of the company

1.1 Product identifier

Product Name: Lysis Buffer C
Product Code: 3R300056

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

Relevant use(s): Laboratory chemicals. For professional users only.
Uses advised against: All uses not specified in this section or in section 7.3.

1.3 Details of the supplier of the safety data sheet

Manufacturer: Zinexts Life Science Corp.
16F., No. 93, Sec. 1, Xintai 5th Rd., Xizhi Dist.,
New Taipei City 221416, Taiwan (R.O.C.)
Tel: +886 2 2246 3579
Fax: +886 2 2243 8570

1.4 Emergency telephone number

CHEMTREC: +1 703-527-3887
+(44)-870-8200418

Section 2. Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP)

Acute Toxicity, Category 4	H302, H312, H332
Skin Corrosion, Category 1C	H314
Serious Eye Damage, Category 1	H318
Chronic Aquatic Toxicity, Category 3	H412

2.2 Label elements, including precautionary statements

Labelling according to Regulation (EC) No 1272/2008 (CLP)

Hazard pictograms:



Signal Word: Danger

Hazard Statements: H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.

H332 Harmful if inhaled.
H415 Harmful to aquatic life with long lasting effects.

Precautionary statements: Prevention:
P264 Wash thoroughly after handling.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Hazardous components to be listed on the label: Guanidine thiocyanate

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bio-accumulative and toxic (PBT), or very persistent and very bio-accumulative (vPvB) at levels of 0.1% or higher.

Section 3. Composition and information on ingredients

3.1 Substances Not applicable, product is a mixture.

3.2 Mixtures

Hazardous component(s)

Chemical Name	CAS-No. / EC-No.	Classification	Concentration (% w/w)
Guanidine thiocyanate	593-84-0 209-812-1	Acute Tox. 4; H302, H312, H332 Skin Corr. 1C; H314 Ser. Eye Dam. 1; H318 Chron. Aqua. Tox. 3; H412	≥ 20 - < 50

Section 4. First aid measures

4.1 Description of first aid measures

General advice: Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.

If inhaled: If unconscious place in recovery position and seek medical advice.
If symptoms persist, call a physician.

In case of skin contact: Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty.

In case of eye contact: Small amounts splashed into eyes can cause irreversible tissue damage and blindness. Rinse immediately with plenty of water and consult a physician.
Remove contact lenses.
Protect unharmed eye.

If swallowed: If accidentally swallowed, obtain immediate medical attention.

Rinse mouth with water.

Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms: No information available.

Effects: Causes skin burns and serious eye damage.

In case of inhalation, irritation may occur.

Harmful if swallowed.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment: No information available

Section 5. Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: Water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Special hazards during firefighting: Do not allow run-off from firefighting to enter drains or water courses.

Exposure to decomposition products may be a hazard to health.

Hazardous combustion products: Carbon oxides, Nitrogen oxides (NOx), Sulphur oxides.

5.3 Advice for firefighters

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

In the event of fire and/or explosion do not breathe fumes.

Section 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions: Wear appropriate personal protective equipment. Avoid contact with skin and eyes. Provide adequate ventilation. Avoid breathing dust/fume/gas/mist/vapors/spray.

6.2 Environmental precautions

Environmental precautions: Prevent entry to sewers and public waters. Prevent further leakage or spillage if safe to do so.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder sawdust). Keep in suitable, closed containers for disposal according to local/national regulations.

Unsuitable cleaning agents: sodium hypochlorite.

6.4 Reference to other sections

See section 8 and 13 for further information.

Section 7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling: Do not breath vapor/mist/dust and avoid contact with skin and eyes.
Provide adequate ventilation. Avoid exposure - obtain special instructions before use.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area. Wash hands before breaks and at the end of workday.
Dispose of rinse water in accordance to local and national regulations.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas: Keep container tightly closed in a dry and well-ventilated place.
Do not store near acids.

7.3 Specific end use(s)

Specific use(s): Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

Section 8. Exposure controls/personal protection

8.1 Control parameters Contains no substance with occupational exposure limit values.

8.2 Exposure controls

Personal protective equipment:

Eye protection: Tightly fitting safety goggles.
Do not wear contact lenses.
Ensure that eyewash stations and safety showers are close to the workstation location.

Hand protection material: Wear chemical-resistant protective gloves (EN 374), material nitrile rubber (recommendation: Camatril 730), break-through time > 480 min., glove thickness 0.4 mm.

Skin and body protection: Appropriate protective clothing.
Footwear protecting against chemicals.

Respiratory protection: Do not inhale gases, vapors, aerosols or dust - use respiratory protection equipment with an approved filter.

Environmental control measures:

Avoid discharge into drains and waterways whenever possible.

Section 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance:	Liquid
Color:	No data available
Odor:	Characteristic
Odor Threshold:	No data available
pH:	6.5 – 7.5
Melting point/range:	No data available
Boiling point/boiling range:	No data available
Flash point:	Not applicable
Evaporation rate:	No data available
Burning rate:	No data available
Upper explosion limit:	Not applicable
Lower explosion limit:	Not applicable
Vapor pressure:	No data available
Relative vapor density:	No data available
Relative density:	No data available
Density:	0.9 – 1.1 g/cm ³ (at 25 °C)
Solubility(ies)	
Water solubility:	Soluble
Solubility in other solvents:	No data available
Partition coefficient:	
n-octanol/water:	No data available
Auto-ignition temperature:	not determined
Decomposition temperature:	No data available
Viscosity	
Viscosity, dynamic:	No data available
Viscosity, kinematic:	No data available
Explosive properties:	No data available
Oxidizing properties:	No data available

9.2 Other information

No information available

Section 10. Stability and reactivity

10.1 Reactivity

No decomposition if stored and applied as directed.

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Stable under recommended storage conditions.

Hazardous decomposition products formed under fire conditions.

Thiocyanates can develop poisonous gases in contact with strong acids.

Keep away from oxidizing agents, and acidic or alkaline products.

10.4 Conditions to avoid

No information available

10.5 Incompatible materials

No data available

10.6 Hazardous decomposition products

No decomposition if stored and applied as directed.

Section 11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity Harmful if swallowed or inhaled.

Component: Guanidine thiocyanate

Acute oral toxicity: Oral LD50 (rat): 593 mg/kg

Acute inhalation toxicity: No data available

Acute dermal toxicity: No data available

Skin corrosion/irritation Causes severe skin burns.

Component: Guanidine thiocyanate May cause skin burns and corrosions.

Serious eye damage/

eye irritation Causes serious eye damage.

Component: Guanidine thiocyanate May cause severe eye irritation.

Respiratory or skin

sensitization Skin sensitization: No data available

Respiratory sensitization: No data available

Germ cell mutagenicity Not classified based on available information.

Carcinogenicity Not classified based on available information.

IARC: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA: No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP: No ingredient of this product present at levels greater than or equal to

	0.1% is identified as a known or anticipated carcinogen by NTP.
Reproductive toxicity	Not classified based on available information.
STOT-single exposure	Not classified based on available information.
STOT-repeated exposure	Not classified based on available information.
Aspiration toxicity	Not classified based on available information.

11.2 Information on other hazards

No information available

Section 12. Ecological information

12.1 Ecotoxicity

Component: Guanidine thiocyanate

Toxicity to fish:	LC50 (4 days): 89.1 mg/l (Poecilia reticula)
Toxicity to algae:	EC50 (3 days): 130 mg/l (Desmodesmus subspicatus)
Toxicity to bacteria:	No data available

12.2 Persistence and degradability

Component: Guanidine thiocyanate

Inherently degradable

12.3 Bio-accumulative potential

Component: Guanidine thiocyanate

Bioaccumulation: No potential for bioaccumulation.

12.4 Mobility in soil

No data available

12.5 Result of PBT/vPvB assessment

Product does not contain any components that are assed to be a PBT or a vPvB.

12.6 Endocrine disruptive properties

Not applicable

12.7 Other adverse effects

No data available

Section 13. Disposal considerations

13.1 Waste treatment methods

Product:	The product should not be allowed to enter drains, water courses or the soil. Send to a licensed waste management company. Dispose of as hazardous waste in compliance with local and national regulations.
Contaminated packaging:	Dispose of as unused product. Do not re-use empty containers.

Section 14. Transport information

	ADR/RID/ADN	IMDG/IMO	ICAO-TI/IATA	49CFR
14.1 UN number	UN 1760	UN 1760	UN 1760	UN 1760
14.2 Proper shipping name	CORROSIVE LIQUID, N.O.S. (GUANIDINE THIOCYANATE)	CORROSIVE LIQUID, N.O.S. (GUANIDINE THIOCYANATE)	Corrosive liquid, n.o.s. (GUANIDINE THIOCYANATE)	Corrosive liquid, n.o.s. (GUANIDINE THIOCYANATE)
14.3 Transport hazard class(es) / code(s)	8	8	8	8
Label(s)	8	8	Corrosive	8
14.4 Packing group	III / C9 / 80	III	III	III
14.5 Environmental hazards	None	None	None	None

14.6 Special precautions for user The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

For personal protection see section 8.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Section 15. Regulatory information

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

REACH – Annex XIV	Not applicable
REACH – Candidate list of substances of very high concern for authorization	Not applicable
REACH – Annex XVII	Regulated according to No. 3 of the list
Directive 2012/18/EU	Not applicable
EPCRA – SARA 311/312	Acute health hazard
EPCRA – SARA 302	Not applicable
EPCRA – SARA 313	Not applicable
US State Regulations, California, Prop. 65	Not applicable
TSCA list	No substances are subject to a Significant New Use Rule. No substances are subject to TSCA 12(b) export notification requirements.

15.2 Chemical safety assessment No chemical safety assessment has been carried out.

Section 16. Other information

Reason for revision: New document.

Reason number: 1.0

Reason date: April 13, 2023

References: ECHA: <http://echa.europa.eu/>
TOXNET: <http://toxnet.nlm.nih.gov/>
eChem Portal: <http://www.echemportal.org/>
LOLI database: <https://www.chemadvisor.com/loli-databas>

The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. The information in this SDS does not constitute a warranty, expressed or implied, including any implied warranty of merchantability or fitness for any particular purpose.

Safety Data Sheet

Magnetic Beads B

Section 1. Identification of the substance/mixture and of the company

1.1 Product identifier

Product Name: Magnetic Beads B
Product Code: 3R400001

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

Relevant use(s): Laboratory chemicals. For professional users only.
Uses advised against: All uses not specified in this section or in section 7.3.

1.3 Details of the supplier of the safety data sheet

Manufacturer: Zinexts Life Science Corp.
16F., No. 93, Sec. 1, Xintai 5th Rd., Xizhi Dist.,
New Taipei City 221416, Taiwan (R.O.C.)
Tel: +886 2 2246 3579
Fax: +886 2 2243 8570

1.4 Emergency telephone number

CHEMTREC: +1 703-527-3887
+(44)-870-8200418

Section 2. Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP)
Not a hazardous substance or mixture

2.2 Label elements, including precautionary statements

Not a hazardous substance or mixture

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bio-accumulative and toxic (PBT), or very persistent and very bio-accumulative (vPvB) at levels of 0.1% or higher.

Section 3. Composition and information on ingredients

The product contains no substances which, at their given concentration, are considered to be hazardous to health. We recommend handling all chemicals with caution.

Section 4. First aid measures

4.1 Description of first aid measures

General advice: Show this safety data sheet to the doctor in attendance.

If inhaled: Move to fresh air.
If symptoms persist, call a physician.

In case of skin contact: Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
If symptoms persist, call a physician.

In case of eye contact: Remove contact lenses.
Protect unharmed eye.
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed: If accidentally swallowed, obtain immediate medical attention.
Rinse mouth with water.
Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms: No information available.
Effects: No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment: No information available

Section 5. Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.2 Special hazards arising from the substance or mixture

Special hazards during firefighting: Exposure to decomposition products may be a hazard to health.
Hazardous combustion products: No information available.

5.3 Advice for firefighters

Special protective equipment: In the event of fire and/or explosion do not breathe fumes.
Wear self-contained breathing apparatus for firefighting if necessary.

Section 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions: Wear appropriate personal protective equipment.
Avoid breathing dust/fume/gas/mist/vapor/spray.

6.2 Environmental precautions

Environmental precautions: No special environmental precautions required.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder sawdust). Keep in suitable, closed containers for

disposal according to local/national regulations.

- 6.4 Reference to other sections** See section 8 and 13 for further information.

Section 7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling: Smoking, eating and drinking should be prohibited in the application area.

For personal protection see section 8.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas: Keep container tightly closed in a dry and well-ventilated place.

7.3 Specific end use(s)

Specific use(s): Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

Section 8. Exposure controls/personal protection

- 8.1 Control parameters** Contains no substance with occupational exposure limit values.

8.2 Exposure controls

Personal protective equipment:

Eye protection: Wear safety glasses.

Do not wear contact lenses.

Hand protection material: Wear chemical-resistant protective gloves (EN 374).

Skin and body protection: Appropriate protective clothing.

Footwear protecting against chemicals.

Respiratory protection: In case of insufficient ventilation wear respirators and components tested and approved under appropriate government standards.

Environmental control measures:

No special environmental precautions required.

Section 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance: Suspension

Color: No data available

Odor: No data available

Odor Threshold: No data available

pH: 6 - 7

Melting point/range: No data available

Boiling point/boiling range:	No data available
Flash point:	Not applicable
Evaporation rate:	No data available
Burning rate:	No data available
Upper explosion limit:	Not applicable
Lower explosion limit:	Not applicable
Vapor pressure:	No data available
Relative vapor density:	No data available
Relative density:	No data available
Density:	No data available
Solubility(ies)	
Water solubility:	Partly soluble
Solubility in other solvents:	No data available
Partition coefficient:	
n-octanol/water:	No data available
Auto-ignition temperature:	not determined
Decomposition temperature:	No data available
Viscosity	
Viscosity, dynamic:	No data available
Viscosity, kinematic:	No data available
Explosive properties:	No data available
Oxidizing properties:	No data available

9.2 Other information

No information available

Section 10. Stability and reactivity

10.1 Reactivity

No decomposition if stored and applied as directed.

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Stable under recommended storage conditions.

Hazardous decomposition products formed under fire conditions.

10.4 Conditions to avoid

No information available

10.5 Incompatible materials

No data available

10.6 Hazardous decomposition products

No decomposition if stored and applied as directed

Section 11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity	Not classified based on available information.
Product	
Acute oral toxicity:	No data available
Acute inhalation toxicity:	No data available
Acute dermal toxicity:	No data available
Skin corrosion/irritation	Not classified based on available information.
Product	Remarks: May cause skin irritation in susceptible persons.
Serious eye damage/ eye irritation	Not classified based on available information.
Product	Remarks: May irritate eyes.
Respiratory or skin sensitization	Skin sensitization: Not classified based on available information. Respiratory sensitization: Not classified based on available information.
Product	Remarks: No data available
Germ cell mutagenicity	Not classified based on available information.
Carcinogenicity	Not classified based on available information. <u>IARC</u> : No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. <u>OSHA</u> : No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. <u>NTP</u> : No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
Reproductive toxicity	Not classified based on available information.
STOT-single exposure	Not classified based on available information.
STOT-repeated exposure	Not classified based on available information.
Aspiration toxicity	Not classified based on available information.

11.2 Information on other hazards

No information available

Section 12. Ecological information

12.1 Ecotoxicity

Product	Toxicity to fish:	No data available
	Toxicity to algae:	No data available
	Toxicity to bacteria:	No data available

12.2 Persistence and degradability No data available

12.3 Bio-accumulative potential

Product	Bioaccumulation:	No data available
----------------	------------------	-------------------

12.4 Mobility in soil No data available

12.5 Result of PBT/vPvB assessment Product does not contain any components that are assed to be a PBT or a vPvB.

12.6 Endocrine disruptive properties Not applicable

12.7 Other adverse effects No data available

Section 13. Disposal considerations

13.1 Waste treatment methods

Product:	Dispose of contents/containers in compliance with local and national regulations.
Contaminated packaging:	Empty containers should be taken to an approved waste handling site for recycling or disposal.

Section 14. Transport information

Product is not regulated as dangerous good.

	ADR/RID/ADN	IMDG/IMO	ICAO-TI/IATA	49CFR
14.1 UN number	-	-	-	-
14.2 Proper shipping name	-	-	-	-
14.3 Transport hazard class(es) / code(s)	-	-	-	-
Label(s)	-	-	-	-
14.4 Packing group	-	-	-	-
14.5 Environmental hazards	-	-	-	-

14.6 Special precautions for user No data available

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Section 15. Regulatory information

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

REACH – Annex XIV Not applicable

REACH – Candidate list of substances of very high concern for authorization	Not applicable
REACH – Annex XVII	Not applicable
Directive 2012/18/EU	Not applicable
EPCRA – SARA 311/312	Not applicable
EPCRA – SARA 302	Not applicable
EPCRA – SARA 313	Not applicable
US State Regulations, California, Prop. 65	Not applicable
TSCA list	No substances are subject to a Significant New Use Rule. No substances are subject to TSCA 12(b) export notification requirements.
15.2 Chemical safety assessment	No chemical safety assessment has been carried out.

Section 16. Other information

Reason for revision: Update according to Commission Regulation (EU) 2020/878.

Reason number: 2.9

Reason date: April 13, 2023

References: ECHA: <http://echa.europa.eu/>
TOXNET: <http://toxnet.nlm.nih.gov/>
eChem Portal: <http://www.echemportal.org/>
LOLI database: <https://www.chemadvisor.com/loli-databas>

The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. The information in this SDS does not constitute a warranty, expressed or implied, including any implied warranty of merchantability or fitness for any particular purpose.

Safety Data Sheet

RNase-free water

Section 1. Identification of the substance/mixture and of the company

1.1 Product identifier

Product Name: RNase-free water
Product Code: 3R300027

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

Relevant use(s): Laboratory chemicals. For professional users only.
Uses advised against: All uses not specified in this section or in section 7.3.

1.3 Details of the supplier of the safety data sheet

Manufacturer: Zinexts Life Science Corp.
16F., No. 93, Sec. 1, Xintai 5th Rd., Xizhi Dist.,
New Taipei City 221416, Taiwan (R.O.C.)
Tel: +886 2 2246 3579
Fax: +886 2 2243 8570

1.4 Emergency telephone number

CHEMTREC: +1 703-527-3887
+(44)-870-8200418

Section 2. Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP)
Not a hazardous substance or mixture

2.2 Label elements, including precautionary statements

Not a hazardous substance or mixture

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bio-accumulative and toxic (PBT), or very persistent and very bio-accumulative (vPvB) at levels of 0.1% or higher.

Section 3. Composition and information on ingredients

The product contains no substances which, at their given concentration, are considered to be hazardous to health. We recommend handling all chemicals with caution.

Section 4. First aid measures

4.1 Description of first aid measures

General advice: Show this safety data sheet to the doctor in attendance.

If inhaled: Move to fresh air.
If symptoms persist, call a physician.

In case of skin contact: Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
If symptoms persist, call a physician.

In case of eye contact: Remove contact lenses.
Protect unharmed eye.
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed: If accidentally swallowed, obtain immediate medical attention.
Rinse mouth with water.
Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms: No information available.
Effects: No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment: No information available

Section 5. Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.2 Special hazards arising from the substance or mixture

Special hazards during firefighting: Exposure to decomposition products may be a hazard to health.
Hazardous combustion products: No information available.

5.3 Advice for firefighters

Special protective equipment: In the event of fire and/or explosion do not breathe fumes.
Wear self-contained breathing apparatus for firefighting if necessary.

Section 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions: Wear appropriate personal protective equipment.
Avoid breathing dust/fume/gas/mist/vapor/spray.

6.2 Environmental precautions

Environmental precautions: No special environmental precautions required.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder sawdust). Keep in suitable, closed containers for

disposal according to local/national regulations.

- 6.4 Reference to other sections** See section 8 and 13 for further information.

Section 7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling: Smoking, eating and drinking should be prohibited in the application area.

For personal protection see section 8.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas: Keep container tightly closed in a dry and well-ventilated place.

7.3 Specific end use(s)

Specific use(s): Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

Section 8. Exposure controls/personal protection

- 8.1 Control parameters** Contains no substance with occupational exposure limit values.

8.2 Exposure controls

Personal protective equipment:

Eye protection: Wear safety glasses.

Do not wear contact lenses.

Hand protection material: Wear chemical-resistant protective gloves (EN 374).

Skin and body protection: Appropriate protective clothing.

Footwear protecting against chemicals.

Respiratory protection: In case of insufficient ventilation wear respirators and components tested and approved under appropriate government standards.

Environmental control measures:

No special environmental precautions required.

Section 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance: Liquid

Color: Colorless

Odor: Characteristic

Odor Threshold: No data available

pH: 5 - 7

Melting point/range: No data available

Boiling point/boiling range:	No data available
Flash point:	Not applicable
Evaporation rate:	No data available
Burning rate:	No data available
Upper explosion limit:	Not applicable
Lower explosion limit:	Not applicable
Vapor pressure:	No data available
Relative vapor density:	No data available
Relative density:	No data available
Density:	No data available
Solubility(ies)	
Water solubility:	Soluble
Solubility in other solvents:	No data available
Partition coefficient:	
n-octanol/water:	No data available
Auto-ignition temperature:	not determined
Decomposition temperature:	No data available
Viscosity	
Viscosity, dynamic:	No data available
Viscosity, kinematic:	No data available
Explosive properties:	No data available
Oxidizing properties:	No data available

9.2 Other information

No information available

Section 10. Stability and reactivity

10.1 Reactivity

No decomposition if stored and applied as directed.

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Stable under recommended storage conditions.

Hazardous decomposition products formed under fire conditions.

10.4 Conditions to avoid

No information available

10.5 Incompatible materials

No data available

10.6 Hazardous decomposition products

No decomposition if stored and applied as directed

Section 11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity	Not classified based on available information.
Product	
Acute oral toxicity:	No data available
Acute inhalation toxicity:	No data available
Acute dermal toxicity:	No data available
Skin corrosion/irritation	Not classified based on available information.
Product	Remarks: May cause skin irritation in susceptible persons.
Serious eye damage/ eye irritation	Not classified based on available information.
Product	Remarks: May irritate eyes.
Respiratory or skin sensitization	Skin sensitization: Not classified based on available information. Respiratory sensitization: Not classified based on available information.
Product	Remarks: No data available
Germ cell mutagenicity	Not classified based on available information.
Carcinogenicity	Not classified based on available information. <u>IARC</u> : No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. <u>OSHA</u> : No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. <u>NTP</u> : No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
Reproductive toxicity	Not classified based on available information.
STOT-single exposure	Not classified based on available information.
STOT-repeated exposure	Not classified based on available information.
Aspiration toxicity	Not classified based on available information.

11.2 Information on other hazards

No information available

Section 12. Ecological information

12.1 Ecotoxicity

Product	Toxicity to fish:	No data available
	Toxicity to algae:	No data available
	Toxicity to bacteria:	No data available

12.2 Persistence and degradability No data available

12.3 Bio-accumulative potential

Product	Bioaccumulation:	No data available
----------------	------------------	-------------------

12.4 Mobility in soil No data available

12.5 Result of PBT/vPvB assessment Product does not contain any components that are assed to be a PBT or a vPvB.

12.6 Endocrine disruptive properties Not applicable

12.7 Other adverse effects No data available

Section 13. Disposal considerations

13.1 Waste treatment methods

Product:	Dispose of contents/containers in compliance with local and national regulations.
Contaminated packaging:	Empty containers should be taken to an approved waste handling site for recycling or disposal.

Section 14. Transport information

Product is not regulated as dangerous good.

	ADR/RID/ADN	IMDG/IMO	ICAO-TI/IATA	49CFR
14.1 UN number	-	-	-	-
14.2 Proper shipping name	-	-	-	-
14.3 Transport hazard class(es) / code(s)	-	-	-	-
Label(s)	-	-	-	-
14.4 Packing group	-	-	-	-
14.5 Environmental hazards	-	-	-	-

14.6 Special precautions for user No data available

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Section 15. Regulatory information

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

REACH – Annex XIV Not applicable

REACH – Candidate list of substances of very high concern for authorization	Not applicable
REACH – Annex XVII	Not applicable
Directive 2012/18/EU	Not applicable
EPCRA – SARA 311/312	Not applicable
EPCRA – SARA 302	Not applicable
EPCRA – SARA 313	Not applicable
US State Regulations, California, Prop. 65	Not applicable
TSCA list	No substances are subject to a Significant New Use Rule. No substances are subject to TSCA 12(b) export notification requirements.
15.2 Chemical safety assessment	No chemical safety assessment has been carried out.

Section 16. Other information

Reason for revision: Update according to Commission Regulation (EU) 2020/878.

Reason number: 2.9

Reason date: April 13, 2023

References: ECHA: <http://echa.europa.eu/>
TOXNET: <http://toxnet.nlm.nih.gov/>
eChem Portal: <http://www.echemportal.org/>
LOLI database: <https://www.chemadvisor.com/loli-databas>

The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. The information in this SDS does not constitute a warranty, expressed or implied, including any implied warranty of merchantability or fitness for any particular purpose.

Safety Data Sheet

Wash Buffer A

Section 1. Identification of the substance/mixture and of the company

1.1 Product identifier

Product Name: Wash Buffer A
Product Code: 3R300021

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

Relevant use(s): Laboratory chemicals. For professional users only.
Uses advised against: All uses not specified in this section or in section 7.3.

1.3 Details of the supplier of the safety data sheet

Manufacturer: Zinexts Life Science Corp.
16F., No. 93, Sec. 1, Xintai 5th Rd., Xizhi Dist.,
New Taipei City 221416, Taiwan (R.O.C.)
Tel: +886 2 2246 3579
Fax: +886 2 2243 8570

1.4 Emergency telephone number

CHEMTREC: +1 703-527-3887
+(44)-870-8200418

Section 2. Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP)
Not a hazardous substance or mixture

2.2 Label elements, including precautionary statements

Not a hazardous substance or mixture

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bio-accumulative and toxic (PBT), or very persistent and very bio-accumulative (vPvB) at levels of 0.1% or higher.

Section 3. Composition and information on ingredients

The product contains no substances which, at their given concentration, are considered to be hazardous to health. We recommend handling all chemicals with caution.

Section 4. First aid measures

4.1 Description of first aid measures

General advice: Show this safety data sheet to the doctor in attendance.

If inhaled: Move to fresh air.
If symptoms persist, call a physician.

In case of skin contact: Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
If symptoms persist, call a physician.

In case of eye contact: Remove contact lenses.
Protect unharmed eye.
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed: If accidentally swallowed, obtain immediate medical attention.
Rinse mouth with water.
Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms: No information available.
Effects: No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment: No information available

Section 5. Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.2 Special hazards arising from the substance or mixture

Special hazards during firefighting: Exposure to decomposition products may be a hazard to health.
Hazardous combustion products: No information available.

5.3 Advice for firefighters

Special protective equipment: In the event of fire and/or explosion do not breathe fumes.
Wear self-contained breathing apparatus for firefighting if necessary.

Section 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions: Wear appropriate personal protective equipment.
Avoid breathing dust/fume/gas/mist/vapor/spray.

6.2 Environmental precautions

Environmental precautions: No special environmental precautions required.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder sawdust). Keep in suitable, closed containers for

disposal according to local/national regulations.

- 6.4 Reference to other sections** See section 8 and 13 for further information.

Section 7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling: Smoking, eating and drinking should be prohibited in the application area.

For personal protection see section 8.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas: Keep container tightly closed in a dry and well-ventilated place.

7.3 Specific end use(s)

Specific use(s): Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

Section 8. Exposure controls/personal protection

- 8.1 Control parameters** Contains no substance with occupational exposure limit values.

8.2 Exposure controls

Personal protective equipment:

Eye protection: Wear safety glasses.

Do not wear contact lenses.

Hand protection material: Wear chemical-resistant protective gloves (EN 374).

Skin and body protection: Appropriate protective clothing.

Footwear protecting against chemicals.

Respiratory protection: In case of insufficient ventilation wear respirators and components tested and approved under appropriate government standards.

Environmental control measures:

No special environmental precautions required.

Section 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance: Liquid

Color: Colorless

Odor: Characteristic

Odor Threshold: No data available

pH: 7 - 8

Melting point/range: No data available

Boiling point/boiling range:	No data available
Flash point:	Not applicable
Evaporation rate:	No data available
Burning rate:	No data available
Upper explosion limit:	Not applicable
Lower explosion limit:	Not applicable
Vapor pressure:	No data available
Relative vapor density:	No data available
Relative density:	No data available
Density:	0.83 – 0.86 g/cm ³ (at 25 °C)
Solubility(ies)	
Water solubility:	Soluble
Solubility in other solvents:	No data available
Partition coefficient:	
n-octanol/water:	No data available
Auto-ignition temperature:	not determined
Decomposition temperature:	No data available
Viscosity	
Viscosity, dynamic:	No data available
Viscosity, kinematic:	No data available
Explosive properties:	No data available
Oxidizing properties:	No data available

9.2 Other information

No information available

Section 10. Stability and reactivity

10.1 Reactivity

No decomposition if stored and applied as directed.

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Stable under recommended storage conditions.

Hazardous decomposition products formed under fire conditions.

10.4 Conditions to avoid

No information available

10.5 Incompatible materials

No data available

10.6 Hazardous decomposition products

No decomposition if stored and applied as directed

Section 11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity	Not classified based on available information.
Product	
Acute oral toxicity:	No data available
Acute inhalation toxicity:	No data available
Acute dermal toxicity:	No data available
Skin corrosion/irritation	Not classified based on available information.
Product	Remarks: May cause skin irritation in susceptible persons.
Serious eye damage/	
eye irritation	Not classified based on available information.
Product	Remarks: May irritate eyes.
Respiratory or skin	
sensitization	Skin sensitization: Not classified based on available information. Respiratory sensitization: Not classified based on available information.
Product	Remarks: No data available
Germ cell mutagenicity	Not classified based on available information.
Carcinogenicity	Not classified based on available information. <u>IARC</u> : No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. <u>OSHA</u> : No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. <u>NTP</u> : No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
Reproductive toxicity	Not classified based on available information.
STOT-single exposure	Not classified based on available information.
STOT-repeated exposure	Not classified based on available information.
Aspiration toxicity	Not classified based on available information.

11.2 Information on other hazards

No information available

Section 12. Ecological information

12.1 Ecotoxicity

Product	Toxicity to fish:	No data available
	Toxicity to algae:	No data available
	Toxicity to bacteria:	No data available

12.2 Persistence and degradability No data available

12.3 Bio-accumulative potential

Product	Bioaccumulation:	No data available
----------------	------------------	-------------------

12.4 Mobility in soil No data available

12.5 Result of PBT/vPvB assessment Product does not contain any components that are assed to be a PBT or a vPvB.

12.6 Endocrine disruptive properties Not applicable

12.7 Other adverse effects No data available

Section 13. Disposal considerations

13.1 Waste treatment methods

Product:	Dispose of contents/containers in compliance with local and national regulations.
Contaminated packaging:	Empty containers should be taken to an approved waste handling site for recycling or disposal.

Section 14. Transport information

Product is not regulated as dangerous good.

	ADR/RID/ADN	IMDG/IMO	ICAO-TI/IATA	49CFR
14.1 UN number	-	-	-	-
14.2 Proper shipping name	-	-	-	-
14.3 Transport hazard class(es) / code(s)	-	-	-	-
Label(s)	-	-	-	-
14.4 Packing group	-	-	-	-
14.5 Environmental hazards	-	-	-	-

14.6 Special precautions for user No data available

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Section 15. Regulatory information

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

REACH – Annex XIV Not applicable

REACH – Candidate list of substances of very high concern for authorization	Not applicable
REACH – Annex XVII	Not applicable
Directive 2012/18/EU	Not applicable
EPCRA – SARA 311/312	Not applicable
EPCRA – SARA 302	Not applicable
EPCRA – SARA 313	Not applicable
US State Regulations, California, Prop. 65	Not applicable
TSCA list	No substances are subject to a Significant New Use Rule. No substances are subject to TSCA 12(b) export notification requirements.
15.2 Chemical safety assessment	No chemical safety assessment has been carried out.

Section 16. Other information

Reason for revision: Update according to Commission Regulation (EU) 2020/878.

Reason number: 2.9

Reason date: April 13, 2023

References: ECHA: <http://echa.europa.eu/>
TOXNET: <http://toxnet.nlm.nih.gov/>
eChem Portal: <http://www.echemportal.org/>
LOLI database: <https://www.chemadvisor.com/loli-databas>

The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. The information in this SDS does not constitute a warranty, expressed or implied, including any implied warranty of merchantability or fitness for any particular purpose.

Safety Data Sheet

Wash Buffer B

Section 1. Identification of the substance/mixture and of the company

1.1 Product identifier

Product Name: Wash Buffer B
Product Code: 3R300022

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

Relevant use(s): Laboratory chemicals. For professional users only.
Uses advised against: All uses not specified in this section or in section 7.3.

1.3 Details of the supplier of the safety data sheet

Manufacturer: Zinexts Life Science Corp.
16F., No. 93, Sec. 1, Xintai 5th Rd., Xizhi Dist.,
New Taipei City 221416, Taiwan (R.O.C.)
Tel: +886 2 2246 3579
Fax: +886 2 2243 8570

1.4 Emergency telephone number

CHEMTREC: +1 703-527-3887
+(44)-870-8200418

Section 2. Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP)
Not a hazardous substance or mixture

2.2 Label elements, including precautionary statements

Not a hazardous substance or mixture

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bio-accumulative and toxic (PBT), or very persistent and very bio-accumulative (vPvB) at levels of 0.1% or higher.

Section 3. Composition and information on ingredients

The product contains no substances which, at their given concentration, are considered to be hazardous to health. We recommend handling all chemicals with caution.

Section 4. First aid measures

4.1 Description of first aid measures

General advice: Show this safety data sheet to the doctor in attendance.

If inhaled: Move to fresh air.
If symptoms persist, call a physician.

In case of skin contact: Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
If symptoms persist, call a physician.

In case of eye contact: Remove contact lenses.
Protect unharmed eye.
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed: If accidentally swallowed, obtain immediate medical attention.
Rinse mouth with water.
Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms: No information available.
Effects: No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment: No information available

Section 5. Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.2 Special hazards arising from the substance or mixture

Special hazards during firefighting: Exposure to decomposition products may be a hazard to health.
Hazardous combustion products: No information available.

5.3 Advice for firefighters

Special protective equipment: In the event of fire and/or explosion do not breathe fumes.
Wear self-contained breathing apparatus for firefighting if necessary.

Section 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions: Wear appropriate personal protective equipment.
Avoid breathing dust/fume/gas/mist/vapor/spray.

6.2 Environmental precautions

Environmental precautions: No special environmental precautions required.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder sawdust). Keep in suitable, closed containers for

disposal according to local/national regulations.

- 6.4 Reference to other sections** See section 8 and 13 for further information.

Section 7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling: Smoking, eating and drinking should be prohibited in the application area.

For personal protection see section 8.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas: Keep container tightly closed in a dry and well-ventilated place.

7.3 Specific end use(s)

Specific use(s): Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

Section 8. Exposure controls/personal protection

- 8.1 Control parameters** Contains no substance with occupational exposure limit values.

8.2 Exposure controls

Personal protective equipment:

Eye protection: Wear safety glasses.

Do not wear contact lenses.

Hand protection material: Wear chemical-resistant protective gloves (EN 374).

Skin and body protection: Appropriate protective clothing.

Footwear protecting against chemicals.

Respiratory protection: In case of insufficient ventilation wear respirators and components tested and approved under appropriate government standards.

Environmental control measures:

No special environmental precautions required.

Section 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance: Liquid

Color: Colorless

Odor: Characteristic

Odor Threshold: No data available

pH: 7 - 8

Melting point/range: No data available

Boiling point/boiling range:	No data available
Flash point:	Not applicable
Evaporation rate:	No data available
Burning rate:	No data available
Upper explosion limit:	Not applicable
Lower explosion limit:	Not applicable
Vapor pressure:	No data available
Relative vapor density:	No data available
Relative density:	No data available
Density:	0.83 – 0.86 g/cm ³ (at 25 °C)
Solubility(ies)	
Water solubility:	Soluble
Solubility in other solvents:	No data available
Partition coefficient:	
n-octanol/water:	No data available
Auto-ignition temperature:	not determined
Decomposition temperature:	No data available
Viscosity	
Viscosity, dynamic:	No data available
Viscosity, kinematic:	No data available
Explosive properties:	No data available
Oxidizing properties:	No data available

9.2 Other information

No information available

Section 10. Stability and reactivity

10.1 Reactivity

No decomposition if stored and applied as directed.

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Stable under recommended storage conditions.

Hazardous decomposition products formed under fire conditions.

10.4 Conditions to avoid

No information available

10.5 Incompatible materials

No data available

10.6 Hazardous decomposition products

No decomposition if stored and applied as directed

Section 11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity	Not classified based on available information.
Product	
Acute oral toxicity:	No data available
Acute inhalation toxicity:	No data available
Acute dermal toxicity:	No data available
Skin corrosion/irritation	Not classified based on available information.
Product	Remarks: May cause skin irritation in susceptible persons.
Serious eye damage/ eye irritation	Not classified based on available information.
Product	Remarks: May irritate eyes.
Respiratory or skin sensitization	Skin sensitization: Not classified based on available information. Respiratory sensitization: Not classified based on available information.
Product	Remarks: No data available
Germ cell mutagenicity	Not classified based on available information.
Carcinogenicity	Not classified based on available information. <u>IARC</u> : No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. <u>OSHA</u> : No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. <u>NTP</u> : No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
Reproductive toxicity	Not classified based on available information.
STOT-single exposure	Not classified based on available information.
STOT-repeated exposure	Not classified based on available information.
Aspiration toxicity	Not classified based on available information.

11.2 Information on other hazards

No information available

Section 12. Ecological information

12.1 Ecotoxicity

Product	Toxicity to fish:	No data available
	Toxicity to algae:	No data available
	Toxicity to bacteria:	No data available

12.2 Persistence and degradability No data available

12.3 Bio-accumulative potential

Product	Bioaccumulation:	No data available
----------------	------------------	-------------------

12.4 Mobility in soil No data available

12.5 Result of PBT/vPvB assessment Product does not contain any components that are assed to be a PBT or a vPvB.

12.6 Endocrine disruptive properties Not applicable

12.7 Other adverse effects No data available

Section 13. Disposal considerations

13.1 Waste treatment methods

Product:	Dispose of contents/containers in compliance with local and national regulations.
Contaminated packaging:	Empty containers should be taken to an approved waste handling site for recycling or disposal.

Section 14. Transport information

Product is not regulated as dangerous good.

	ADR/RID/ADN	IMDG/IMO	ICAO-TI/IATA	49CFR
14.1 UN number	-	-	-	-
14.2 Proper shipping name	-	-	-	-
14.3 Transport hazard class(es) / code(s)	-	-	-	-
Label(s)	-	-	-	-
14.4 Packing group	-	-	-	-
14.5 Environmental hazards	-	-	-	-

14.6 Special precautions for user No data available

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Section 15. Regulatory information

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

REACH – Annex XIV Not applicable

REACH – Candidate list of substances of very high concern for authorization	Not applicable
REACH – Annex XVII	Not applicable
Directive 2012/18/EU	Not applicable
EPCRA – SARA 311/312	Not applicable
EPCRA – SARA 302	Not applicable
EPCRA – SARA 313	Not applicable
US State Regulations, California, Prop. 65	Not applicable
TSCA list	No substances are subject to a Significant New Use Rule. No substances are subject to TSCA 12(b) export notification requirements.
15.2 Chemical safety assessment	No chemical safety assessment has been carried out.

Section 16. Other information

Reason for revision: Update according to Commission Regulation (EU) 2020/878.

Reason number: 2.9

Reason date: April 13, 2023

References: ECHA: <http://echa.europa.eu/>
TOXNET: <http://toxnet.nlm.nih.gov/>
eChem Portal: <http://www.echemportal.org/>
LOLI database: <https://www.chemadvisor.com/loli-databas>

The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. The information in this SDS does not constitute a warranty, expressed or implied, including any implied warranty of merchantability or fitness for any particular purpose.

Safety Data Sheet

Washing Buffer Z3

Section 1. Identification of the substance/mixture and of the company

1.1 Product identifier

Product Name: Washing Buffer Z3
Product Code: 3R300050

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

Relevant use(s): Laboratory chemicals. For professional users only.
Uses advised against: All uses not specified in this section or in section 7.3.

1.3 Details of the supplier of the safety data sheet

Manufacturer: Zinexts Life Science Corp.
16F., No. 93, Sec. 1, Xintai 5th Rd., Xizhi Dist.,
New Taipei City 221416, Taiwan (R.O.C.)
Tel: +886 2 2246 3579
Fax: +886 2 2243 8570

1.4 Emergency telephone number

CHEMTREC: +1 703-527-3887
+(44)-870-8200418

Section 2. Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP)

Acute Toxicity, Category 4	H302, H312, H332
Skin Corrosion, Category 1C	H314
Serious Eye Damage, Category 1	H318
Chronic Aquatic Toxicity, Category 3	H412

2.2 Label elements, including precautionary statements

Labelling according to Regulation (EC) No 1272/2008 (CLP)

Hazard pictograms:



Signal Word: Danger

Hazard Statements: H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.

H332 Harmful if inhaled.
H415 Harmful to aquatic life with long lasting effects.

Precautionary statements: Prevention:
P264 Wash thoroughly after handling.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Hazardous components to be listed on the label: Guanidine thiocyanate

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bio-accumulative and toxic (PBT), or very persistent and very bio-accumulative (vPvB) at levels of 0.1% or higher.

Section 3. Composition and information on ingredients

3.1 Substances Not applicable, product is a mixture.

3.2 Mixtures

Hazardous component(s)

Chemical Name	CAS-No. / EC-No.	Classification	Concentration (% w/w)
Guanidine thiocyanate	593-84-0 209-812-1	Acute Tox. 4; H302, H312, H332 Skin Corr. 1C; H314 Ser. Eye Dam. 1; H318 Chron. Aqua. Tox. 3; H412	≥ 10 - < 30

Section 4. First aid measures

4.1 Description of first aid measures

General advice: Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.

If inhaled: If unconscious place in recovery position and seek medical advice.
If symptoms persist, call a physician.

In case of skin contact: Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty.

In case of eye contact: Small amounts splashed into eyes can cause irreversible tissue damage and blindness. Rinse immediately with plenty of water and consult a physician.
Remove contact lenses.
Protect unharmed eye.

If swallowed: If accidentally swallowed, obtain immediate medical attention.

Rinse mouth with water.

Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms: No information available.

Effects: Causes skin burns and serious eye damage.

In case of inhalation, irritation may occur.

Harmful if swallowed.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment: No information available

Section 5. Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: Water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Special hazards during firefighting: Do not allow run-off from firefighting to enter drains or water courses.

Exposure to decomposition products may be a hazard to health.

Hazardous combustion products: Carbon oxides, Nitrogen oxides (NOx), Sulphur oxides.

5.3 Advice for firefighters

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

In the event of fire and/or explosion do not breathe fumes.

Section 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions: Wear appropriate personal protective equipment. Avoid contact with skin and eyes. Provide adequate ventilation. Avoid breathing dust/fume/gas/mist/vapors/spray.

6.2 Environmental precautions

Environmental precautions: Prevent entry to sewers and public waters. Prevent further leakage or spillage if safe to do so.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder sawdust). Keep in suitable, closed containers for disposal according to local/national regulations.

Unsuitable cleaning agents: sodium hypochlorite.

6.4 Reference to other sections

See section 8 and 13 for further information.

Section 7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling: Do not breath vapor/mist/dust and avoid contact with skin and eyes.
Provide adequate ventilation. Avoid exposure - obtain special instructions before use.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area. Wash hands before breaks and at the end of workday.
Dispose of rinse water in accordance to local and national regulations.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas: Keep container tightly closed in a dry and well-ventilated place.
Do not store near acids.

7.3 Specific end use(s)

Specific use(s): Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

Section 8. Exposure controls/personal protection

8.1 Control parameters Contains no substance with occupational exposure limit values.

8.2 Exposure controls

Personal protective equipment:

Eye protection: Tightly fitting safety goggles.
Do not wear contact lenses.
Ensure that eyewash stations and safety showers are close to the workstation location.

Hand protection material: Wear chemical-resistant protective gloves (EN 374), material nitrile rubber (recommendation: Camatril 730), break-through time > 480 min., glove thickness 0.4 mm.

Skin and body protection: Appropriate protective clothing.
Footwear protecting against chemicals.

Respiratory protection: Do not inhale gases, vapors, aerosols or dust - use respiratory protection equipment with an approved filter.

Environmental control measures:

Avoid discharge into drains and waterways whenever possible.

Section 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance:	Liquid
Color:	No data available
Odor:	Characteristic
Odor Threshold:	No data available
pH:	5.5 – 6.5
Melting point/range:	No data available
Boiling point/boiling range:	No data available
Flash point:	Not applicable
Evaporation rate:	No data available
Burning rate:	No data available
Upper explosion limit:	Not applicable
Lower explosion limit:	Not applicable
Vapor pressure:	No data available
Relative vapor density:	No data available
Relative density:	No data available
Density:	0.9 – 1.0 g/cm ³ (at 25 °C)
Solubility(ies)	
Water solubility:	Soluble
Solubility in other solvents:	No data available
Partition coefficient:	
n-octanol/water:	No data available
Auto-ignition temperature:	not determined
Decomposition temperature:	No data available
Viscosity	
Viscosity, dynamic:	No data available
Viscosity, kinematic:	No data available
Explosive properties:	No data available
Oxidizing properties:	No data available

9.2 Other information

No information available

Section 10. Stability and reactivity

10.1 Reactivity

No decomposition if stored and applied as directed.

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Stable under recommended storage conditions.

Hazardous decomposition products formed under fire conditions.

Thiocyanates can develop poisonous gases in contact with strong acids.

Keep away from oxidizing agents, and acidic or alkaline products.

10.4 Conditions to avoid

No information available

10.5 Incompatible materials

No data available

10.6 Hazardous decomposition products

No decomposition if stored and applied as directed.

Section 11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity Harmful if swallowed or inhaled.

Component: Guanidine thiocyanate

Acute oral toxicity: Oral LD50 (rat): 593 mg/kg

Acute inhalation toxicity: No data available

Acute dermal toxicity: No data available

Skin corrosion/irritation Causes severe skin burns.

Component: Guanidine thiocyanate May cause skin burns and corrosions.

Serious eye damage/

eye irritation Causes serious eye damage.

Component: Guanidine thiocyanate May cause severe eye irritation.

Respiratory or skin

sensitization Skin sensitization: No data available

Respiratory sensitization: No data available

Germ cell mutagenicity Not classified based on available information.

Carcinogenicity Not classified based on available information.

IARC: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA: No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP: No ingredient of this product present at levels greater than or equal to

	0.1% is identified as a known or anticipated carcinogen by NTP.
Reproductive toxicity	Not classified based on available information.
STOT-single exposure	Not classified based on available information.
STOT-repeated exposure	Not classified based on available information.
Aspiration toxicity	Not classified based on available information.

11.2 Information on other hazards

No information available

Section 12. Ecological information

12.1 Ecotoxicity

Component: Guanidine thiocyanate

Toxicity to fish:	LC50 (4 days): 89.1 mg/l (Poecilia reticula)
Toxicity to algae:	EC50 (3 days): 130 mg/l (Desmodesmus subspicatus)
Toxicity to bacteria:	No data available

12.2 Persistence and degradability

Component: Guanidine thiocyanate

Inherently degradable

12.3 Bio-accumulative potential

Component: Guanidine thiocyanate

Bioaccumulation: No potential for bioaccumulation.

12.4 Mobility in soil

No data available

12.5 Result of PBT/vPvB assessment

Product does not contain any components that are assed to be a PBT or a vPvB.

12.6 Endocrine disruptive properties

Not applicable

12.7 Other adverse effects

No data available

Section 13. Disposal considerations

13.1 Waste treatment methods

Product:	The product should not be allowed to enter drains, water courses or the soil. Send to a licensed waste management company. Dispose of as hazardous waste in compliance with local and national regulations.
Contaminated packaging:	Dispose of as unused product. Do not re-use empty containers.

Section 14. Transport information

	ADR/RID/ADN	IMDG/IMO	ICAO-TI/IATA	49CFR
14.1 UN number	UN 1760	UN 1760	UN 1760	UN 1760
14.2 Proper shipping name	CORROSIVE LIQUID, N.O.S. (GUANIDINE THIOCYANATE)	CORROSIVE LIQUID, N.O.S. (GUANIDINE THIOCYANATE)	Corrosive liquid, n.o.s. (GUANIDINE THIOCYANATE)	Corrosive liquid, n.o.s. (GUANIDINE THIOCYANATE)
14.3 Transport hazard class(es) / code(s)	8	8	8	8
Label(s)	8	8	Corrosive	8
14.4 Packing group	III / C9 / 80	III	III	III
14.5 Environmental hazards	None	None	None	None

14.6 Special precautions for user The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

For personal protection see section 8.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Section 15. Regulatory information

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

REACH – Annex XIV	Not applicable
REACH – Candidate list of substances of very high concern for authorization	Not applicable
REACH – Annex XVII	Regulated according to No. 3 of the list
Directive 2012/18/EU	Not applicable
EPCRA – SARA 311/312	Acute health hazard
EPCRA – SARA 302	Not applicable
EPCRA – SARA 313	Not applicable
US State Regulations, California, Prop. 65	Not applicable
TSCA list	No substances are subject to a Significant New Use Rule. No substances are subject to TSCA 12(b) export notification requirements.

15.2 Chemical safety assessment No chemical safety assessment has been carried out.

Section 16. Other information

Reason for revision: Update according to Commission Regulation (EU) 2020/878.

Reason number: 2.9

Reason date: April 13, 2023

References: ECHA: <http://echa.europa.eu/>
TOXNET: <http://toxnet.nlm.nih.gov/>
eChem Portal: <http://www.echemportal.org/>
LOLI database: <https://www.chemadvisor.com/loli-databas>

The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. The information in this SDS does not constitute a warranty, expressed or implied, including any implied warranty of merchantability or fitness for any particular purpose.