

Universite Mah. Cat Yolu Cad. Ata Teknokent Sitesi
B Blok No: 74/113 Yakutiye Erzurum Turkiye
Tel: 0090 544 327 34 97
Fax: 0090 442 282 20 06 -124

Safety Data Sheet (SDS)

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers

Product Name: EcoSpin RBCL Buffer
Product Code: E2090
CAS Number: -
EC Number: -

1.2 Details of the supplier of the safety data sheet

Company: EcoTech Biotechnology
Address: Universite Mah. Cat Yolu Cad. Ata Teknokent Sitesi B Blok No: 74/113 Yakutiye Erzurum
Turkiye
Telephone: 0090 544 327 34 97
Fax: 0090 442 282 20 06 -124
Emergency
Phone Number: 0090 544 327 34 97

1.3 Product use

For research use only. Not intended for diagnostic or therapeutic use.

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

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

Skin irritation: (Category 2)

Eye irritation: (Category 2)

2.2 GHS Label elements, including precautionary statements

Signal word: Warning
Hazard statements: H319 Causes serious eye irritation,
Symbols/Pictograms:



Precautionary Statements

P264

P280

Wash skin thoroughly after handling.

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

2.3 Other hazards

Hazards not otherwise classified (HNOC) or not covered by GHS

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Product Name

Red Blood Cell Lysis Buffer

Synonyms: -
Concentration: 10x
Formula: -
Molecular Weight: -
This product is a mixture.

3.2 Mixture

Chemical Name	CAS No	Weight %
Ammonium chloride	12125-02-9	5-8

SECTION 4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice	Immediately remove any clothing contaminated by the product. Move out of dangerous area. Consult a physician and show this safety data sheet.
Eye contact	Immediately flush open eyes with running water for at least 15 minutes. Obtain medical aid immediately.
Skin Contact	Immediately flush skin with running water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Obtain medical aid immediately.
Inhalation	Move person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Obtain medical aid.
Ingestion	Do NOT induce vomiting without medical advice. Rinse mouth with water. Never administer anything by mouth to an unconscious person. Obtain medical aid immediately.
Self-protection of the first aider	Use personal protective equipment as required.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing Media	Use water spray, dry chemical, carbon dioxide, or chemical foam.
Unsuitable Extinguishing Media	None

5.2 Special hazards arising from the substance or mixture

Specific hazards arising from the chemical Copper oxides, Sulfur oxides.

5.3 Explosion data

Sensitivity to Mechanical Impact	No information available.
Sensitivity to Static Discharge	No information available.

5.4 Protective equipment and precautions for firefighters

Advice for firefighters As in any fire, wear a NIOSH-approved or equivalent, pressure-demand, self-contained breathing apparatus and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment and keep unprotected personnel away. Ensure adequate ventilation. Remove all sources of ignition. Prevent further leak or spill if safe to do so.

6.2 Environmental precautions

Do not let product enter drains, other waterways, or soil.

6.3 Methods and materials for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Vacuum, sweep up, or absorb with inert material and place into a suitable disposal container.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin, eyes, and personal clothing. Wash hands thoroughly after handling. Avoid breathing fumes. Use only with adequate ventilation. Wear suitable protective clothing, gloves, and eye/face protection. Keep away from sources of ignition. Minimize dust generation and accumulation. Keep container tightly closed. Open and handle container with care. Do not eat, drink, or smoke while handling.

7.2 Conditions for safe storage, including any incompatibilities

Keep tightly closed. Store in a cool, dry, well-ventilated area away from incompatible substances.

Recommended storage temperature 2 - 8°C

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Exposure limits

OSHA PEL: Not available.

NIOSH REL: Not available.

ACGIH TLV: Not available.

8.2 Exposure controls

Engineering measures

Avoid contact with skin, eyes, and clothing. Wash hands before breaks and immediately after handling the product. Facilities storing or utilizing this material should be equipped with an eyewash fountain. Use adequate general and local exhaust ventilation to keep airborne concentrations low.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. When using, do not eat, drink or smoke. Wash hands, forearms and face after handling.

Personal protective equipment

Eye/face protection:

Based on an evaluation of the eye or face hazards present, wear chemical splash-resistant safety glasses or goggles with side protection. A face shield may be appropriate in some workplaces. Use eyewear tested and approved under appropriate government standards such as OSHA 29 CFR 1910.133 or EU EN166.

Hand protection:

Wear gloves selected based on an evaluation of the possible hazards to hands and skin, the duration of use, the physical conditions of the workplace, and the chemical resistance and physical properties of the glove material.

Skin and body protection:

Protective clothing must be selected based on the hazards present in the workplace, the physical environment, the duration of exposure, and other factors. No fabric can provide protection against all potential hazards; therefore it is important to select the appropriate protective clothing for each specific hazard. At the minimum, wear a laboratory coat and close-toed footwear.

Respiratory protection:

Respirators are not a substitute for accepted engineering control measures such as enclosure or confinement of the operation, general and local ventilation, and substitution of less toxic materials. When respiratory personal protective equipment is appropriate based on an assessment of

respiratory hazards in the workplace, use a NIOSH- or CEN-certified respirator.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

a) Appearance:	Liquid
b) Odor:	No data available
c) Odor Threshold:	No data available
d) pH:	No data available
e) Melting point/freezing point:	No data available
f) Initial boiling point and boiling range:	No data available
g) Flash point:	No data available
h) Evaporation rate:	No data available
i) Flammability (solid, gas):	No data available
j) Upper / lower flammability or explosive limits:	No data available
k) Vapor pressure:	No data available
l) Vapor density:	No data available
m) Relative density:	No data available
n) Solubility(ies):	No data available
o) Partition coefficient: <i>n</i> -octanol / water:	No data available
p) Auto-ignition temperature:	No data available
q) Decomposition temperature:	No data available
r) Viscosity:	No data available
s) Explosive properties:	No data available
t) Oxidizing properties:	No data available

SECTION 10. STABILITY AND REACTIVITY

Stability and reactivity

Reactivity:	Not applicable
Chemical stability:	Stable under recommended temperatures and pressures.
Possibility of hazardous reactions:	None under normal processing
Conditions to avoid:	Extremes of temperature and direct sunlight.
Incompatible materials:	Strong oxidizing agents
Hazardous decomposition products:	Copper oxides, Sulfur oxides.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

a) Acute toxicity:	Acute Tox. 4 - H302
b) Skin corrosion / irritation:	Skin contact may result in inflammation characterized by itching, scaling, reddening, blistering, pain or dryness.
c) Serious eye damage/eye irritation:	Eye contact may result in redness, pain or severe eye damage.
d) Carcinogenicity:	None of the ingredients is listed.

IARC : Not classified.

NTP : Not listed.

OSHA : Not listed.

e) Reproductive toxicity:	No data available
f) STOT - SE:	No data available
g) STOT - RE:	No data available
h) Aspiration hazard:	No data available

11.2 Potential health effects

Ingestion:	May be harmful if swallowed.
Inhalation:	May be harmful if inhaled. May cause respiratory tract irritation.
Skin:	May be harmful if absorbed through skin. May cause skin irritation.
Eyes:	Causes serious eye irritation.

11.3 Additional Information

Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

SECTION 12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity

Information on hazard classes as defined in Regulation (EC) No 1272/2008.

The environmental impact of this product has not been fully investigated.

Component	Toxicity
Ammonium chloride	Oral LD50 = 1650 mg/kg (Rat)
	Dermal LD50 > 2000 mg/kg (Rat)
	Inhalation No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment is not required/was not conducted.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Product

Contact a licensed professional waste disposal service to dispose of this material. Dispose of in accordance with federal, state and local requirements.

Contaminated packaging

Dispose of as unused product. Do not reuse empty containers.

Section 14. TRANSPORT INFORMATION

14.1 DOT (US)

Not regulated.

14.2 IMDG

Not regulated.

14.3 IATA

Not regulated.

SECTION 15. REGULATORY INFORMATION

This product is NOT on the EPA Toxic Substance Control Act (TSCA) inventory. The product is supplied solely for use in research and development by or under the supervision of a technically qualified individual as defined in 40 CFR § 720 et seq. The health risks have not been fully determined. Any information that is or becomes available will be supplied on the SDS.

SECTION 16. OTHER INFORMATION

Key to abbreviations and acronyms

STOT-SE: Specific Target Organ Toxicity - Single Exposure

STOT-RE: Specific Target Organ Toxicity - Repeated Exposure

PBT: Persistent Bioaccumulative and Toxic

vPvB: very Persistent very Bioaccumulative and toxic

ADR: European Agreement concerning the international carriage of Dangerous goods by Road

CAS: Chemical Abstracts Service

IARC: International Agency for Research on Cancer

IATA: International Air Transport Association

IMDG: International Maritime code for Dangerous Goods

REACH: Registration, Evaluation, Authorization and restriction of Chemicals

RID: Regulations concerning the International transport of Dangerous goods by rail

Safety Data Sheet (SDS)

Revision Date:
26 March 2022

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers

Product Name: Elution Buffer
Product Code: E2090
CAS Number: -
EC Number: -

1.2 Details of the supplier of the safety data sheet

Company: EcoTech Biotechnology
Address: Universite Mah. İpekyolu Cad. Ata Teknokent A.Ş. B Blok No: 20/113 Yakutiye/Erzurum
Türkiye
Tel/Fax: 0090 442 282 20 44
Emergency
phone number: 0090 553 828 76 90

1.3 Product use

For research use only. Not intended for diagnostic or therapeutic use.

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

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

Physical hazards	Not Hazardous
Health hazards	Not Hazardous
Environmental hazards	Not Hazardous

2.2 Label elements

Symbols/Pictograms	None
Signal word	None
Hazard statements	Not Applicable
Precautionary Statements - Prevention	Not Applicable
Precautionary Statements - Response	Not Applicable

2.3 Other hazards

Not Applicable

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Product Name

Elution Buffer
Synonyms: -
Concentration: -
Formula: -
Molecular Weight: -

3.2 Mixture

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

Eye contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Skin Contact	Rinse skin with water. Immediate medical attention is not required.
Inhalation	Not expected to be an inhalation hazard under anticipated conditions of normal use of this material. Consult a physician if necessary.
Ingestion	Not expected to present a significant ingestion hazard under anticipated conditions of normal use. If you feel unwell, seek medical advice.
Self-protection of the first aider	Use personal protective equipment as required.

Most important symptoms and effects, both acute and delayed

Symptoms Not Applicable

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing Media	Water spray. Carbon dioxide (CO ₂). Foam. Dry chemical.
Unsuitable Extinguishing	No information available

5.2 Special hazards arising from the substance or mixture

Specific hazards arising from the chemical	Not known
--	-----------

5.3 Explosion data

Sensitivity to Mechanical Impact	No information available.
Sensitivity to Static Discharge	No information available.

5.4 Protective equipment and precautions for firefighters

Advice for firefighters	Standard procedure for chemical fires.
-------------------------	--

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Always wear recommended Personal Protective Equipment. Use personal protection equipment

6.2 Environmental precautions

No special environmental precautions required.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up	Soak up with inert absorbent material.
-------------------------	--

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Use personal protective equipment as required. No special handling advices are necessary.

7.2 Conditions for safe storage, including any incompatibilities

Keep tightly closed. Store in a cool, dry, well-ventilated area away from incompatible substances.
Keep in properly labelled containers.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Engineering measures

Ensure adequate ventilation, especially in confined areas.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. When using, do not eat, drink or smoke.
Wash hands, forearms and face after handling.

Personal protective equipment

Eye/face protection: Tight sealing safety goggles.

Hand protection: Wear suitable gloves Glove material: Compatible chemical-resistant gloves.

Skin and body protection: Wear laboratory coat or impervious clothing. Choose appropriate body protection according to the amount and concentration of the substance at the work place.

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

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

a) Appearance:	Liquid
b) Odor:	No data available
c) Odor Threshold:	No data available
d) pH:	No data available
e) Melting point/freezing point:	No data available
f) Initial boiling point and boiling range:	No data available
g) Flash point:	No data available
h) Evaporation rate:	No data available
i) Flammability (solid, gas):	No data available
j) Upper / lower flammability or explosive limits:	No data available
k) Vapor pressure:	No data available
l) Vapor density:	No data available
m) Relative density:	No data available
n) Solubility(ies):	No data available
o) Partition coefficient: <i>n</i> -octanol / water:	No data available
p) Auto-ignition temperature:	No data available
q) Decomposition temperature:	No data available
r) Viscosity:	No data available
s) Explosive properties:	No data available
t) Oxidizing properties:	No data available

SECTION 10. STABILITY AND REACTIVITY

Stability and reactivity

Reactivity: Stable.

Chemical stability: Stable at a cool and dry place.

Possibility of hazardous reactions: Hazardous reaction has not been reported.

Conditions to avoid: No information available.

Incompatible materials: No dangerous reaction known under conditions of normal use.

Hazardous decomposition products: No data available.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

a) Acute toxicity:	There is no evidence available indicating acute toxicity.
b) Skin corrosion / irritation:	Data are conclusive but insufficient for classification.
c) Serious eye damage/eye irritation:	Data are conclusive but insufficient for classification.
d) Carcinogenicity:	Data are conclusive but insufficient for classification.
e) Reproductive toxicity:	Data are conclusive but insufficient for classification.
f) STOT - SE:	Data are conclusive but insufficient for classification.
g) STOT - RE:	Data are conclusive but insufficient for classification.

h) Aspiration hazard: Data are conclusive but insufficient for classification.

11.2 Potential health effects

Ingestion: Data are conclusive but insufficient for classification.

Inhalation: Data are conclusive but insufficient for classification.

Skin: Data are conclusive but insufficient for classification.

Eyes: Data are conclusive but insufficient for classification.

11.3 Additional Information

No additional information is available

SECTION 12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity

Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Product

Contact a licensed professional waste disposal service to dispose of this material. Dispose of in accordance with federal, state and local requirements.

Contaminated packaging

Dispose of as unused product. Do not reuse empty containers.

Section 14. TRANSPORT INFORMATION

14.1 DOT (US)

Not regulated in the meaning of transport regulations.

14.2 IMDG

Not regulated in the meaning of transport regulations

14.3 IATA

Not regulated in the meaning of transport regulations

UN number	Not Applicable
UN proper shipping name	Not Applicable
Transport hazard class(es)	Not Applicable
Packing group	Not Applicable

SECTION 15. REGULATORY INFORMATION

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

Substances of Very High Concern	None.
Substance subject to authorisation per REACH Annex XIV	None
Restricted substances under EC 1907/2006, Annex XVII	None.
Substances listed under Annex I of Regulation (EC) No 689/2008	None.
Restricted substances under Annex V of Regulation (EC) No 689/2008	None.

15.2 Environmental hazards

Not Applicable

15.3 Chemical safety assessment

No Chemical safety assessment has been carried out.

SECTION 16. OTHER INFORMATION

Key to abbreviations and acronyms

STOT-SE: Specific Target Organ Toxicity - Single Exposure

STOT-RE: Specific Target Organ Toxicity - Repeated Exposure

PBT: Persistent Bioaccumulative and Toxic

vPvB: very Persistent very Bioaccumulative and toxic

ADR: European Agreement concerning the international carriage of Dangerous goods by Road

CAS: Chemical Abstracts Service

IARC: International Agency for Research on Cancer

IATA: International Air Transport Association

IMDG: International Maritime code for Dangerous Goods

REACH: Registration, Evaluation, Authorization and restriction of Chemicals

RID: Regulations concerning the International transport of Dangerous goods by rail

Safety Data Sheet (SDS)

Revision Date:
26 March 2022

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers

Product Name: Lysis/Binding Buffer
Product Code: E2090
CAS Number: -
EC Number: -

1.2 Details of the supplier of the safety data sheet

Company: EcoTech Biotechnology
Address: Universite Mah. İpekyolu Cad. Ata Teknokent A.Ş. B Blok No: 20/113 Yakutiye/Erzurum
Türkiye
Tel/Fax: 0090 442 282 20 44
Emergency
phone number: 0090 553 828 76 90

1.3 Product use

For research use only. Not intended for diagnostic or therapeutic use.

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

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

Physical hazards

Not classified

Health hazards

Acute oral toxicity Category 4, Skin corrosion/irritation Category 2,
Acute inhalation toxicity Category 4, Serious eye damage/eye
irritation Category 2

Environmental hazards

Not classified

2.2 Label elements

Symbols/Pictograms



Signal word

Hazard statements

Warning

H302 - Harmful if swallowed

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H332 - Harmful if inhaled

Precautionary Statements - Prevention

P264 - Wash hands thoroughly after handling

P280 - Wear protective gloves/protective clothing/eye
protection/face protection

P270 - Do not eat, drink or smoke when using this product

Precautionary Statements – Response

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
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. Continue rinsing
P330 - Rinse mouth
P332 + P313 - If skin irritation occurs: Get medical advice/attention

2.3 Other hazards

Not Applicable

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Product Name

Lysis/Binding Buffer

Synonyms: -

Concentration: -

Formula: -

Molecular Weight: -

This product is a mixture.

3.2 Mixture

Chemical Name	CAS No	Weight %
Guanidine hydrochloride	50-01-1	70-85

SECTION 4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice	If symptoms persist, call a physician.
Eye contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Skin Contact	Rinse skin with water. Immediate medical attention is not required.
Inhalation	Remove to fresh air. If not breathing, give artificial respiration. If symptoms persist, call a doctor.
Ingestion	Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice. Get medical attention if symptoms occur
Self-protection of the first aider	Use personal protective equipment as required.

Most important symptoms and effects, both acute and delayed

Symptoms	H302 - Harmful if swallowed H314 - Causes severe skin burns and eye damage
----------	---

Indication of any immediate medical attention and special treatment needed

IF INHALED: Remove person to fresh air and keep comfortable for breathing. If skin irritation occurs: Get medical advice/ attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing Media	Water spray. Carbon dioxide (CO2). Foam. Dry chemical.
Unsuitable Extinguishing	No information available

5.2 Special hazards arising from the substance or mixture

Specific hazards arising from the chemical	No information available.
--	---------------------------

5.3 Explosion data

Sensitivity to Mechanical Impact	No information available.
Sensitivity to Static Discharge	No information available.

5.4 Protective equipment and precautions for firefighters

Advice for firefighters

Standard procedure for chemical fires.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Always wear recommended Personal Protective Equipment. Use personal protection equipment

6.2 Environmental precautions

No special environmental precautions required.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up Soak up with inert absorbent material.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Use personal protective equipment as required. No special handling advices are necessary.

7.2 Conditions for safe storage, including any incompatibilities

Keep tightly closed. Store in a cool, dry, well-ventilated area away from incompatible substances.

Keep in properly labelled containers.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Occupational Exposure Limits (OEL)

INGREDIENT DATA

Not

Available

8.2 Exposure controls

Engineering measures

Ensure adequate ventilation, especially in confined areas.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. When using, do not eat, drink or smoke.

Wash hands, forearms and face after handling.

Personal protective equipment

Eye/face protection:

Tight sealing safety goggles.

Hand protection:

Wear suitable gloves Glove material: Compatible chemical-resistant gloves.

Skin and body protection:

Wear laboratory coat or impervious clothing. Choose appropriate body protection according to the amount and concentration of the substance at the work place.

Respiratory protection:

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

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

a) Appearance:	Liquid
b) Odor:	No data available
c) Odor Threshold:	No data available
d) pH:	No data available
e) Melting point/freezing point:	No data available
f) Initial boiling point and boiling range:	No data available
g) Flash point:	No data available
h) Evaporation rate:	No data available
i) Flammability (solid, gas):	No data available
j) Upper / lower flammability or explosive limits:	No data available
k) Vapor pressure:	No data available
l) Vapor density:	No data available

m) Relative density:	No data available
n) Solubility(ies):	No data available
o) Partition coefficient: <i>n</i> -octanol / water:	No data available
p) Auto-ignition temperature:	No data available
q) Decomposition temperature:	No data available
r) Viscosity:	No data available
s) Explosive properties:	No data available
t) Oxidizing properties:	No data available

SECTION 10. STABILITY AND REACTIVITY

Stability and reactivity

Reactivity:	Not applicable.
Chemical stability:	Stable at a cool and dry place.
Possibility of hazardous reactions:	Hazardous reaction has not been reported.
Conditions to avoid:	Contact with acids or bleach liberates toxic gases. DO NOT ADD acids or bleach to any liquid wastes containing this product.
Incompatible materials:	No dangerous reaction known under conditions of normal use.
Hazardous decomposition products:	Carbon oxides. Nitrogen oxides (NO _x). Sulphur oxides.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

a) Acute toxicity:

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Guanidine hydrochloride	354 mg/kg (Rat)	1100 mg/kg	11 mg/14h

b) Skin corrosion / irritation:	Skin irritation.
c) Serious eye damage/eye irritation:	Irritating to eyes.
d) Carcinogenicity:	Data are conclusive but insufficient for classification.
e) Reproductive toxicity:	Data are conclusive but insufficient for classification.
f) STOT - SE:	Data are conclusive but insufficient for classification.
g) STOT - RE:	Data are conclusive but insufficient for classification.
h) Aspiration hazard:	Data are conclusive but insufficient for classification.

11.2 Potential health effects

Ingestion:	May be harmful if swallowed.
Inhalation:	May be harmful if inhaled. May cause respiratory tract irritation.
Skin:	May be harmful if absorbed through skin. May cause skin irritation.
Eyes:	May cause eye irritation.

11.3 Additional Information

No additional information is available

SECTION 12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity

The environmental impact of this product has not been fully investigated.

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

No information available.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Product

Contact a licensed professional waste disposal service to dispose of this material. Dispose of in accordance with federal, state and local requirements.

Contaminated packaging

Dispose of as unused product. Do not reuse empty containers.

Section 14. TRANSPORT INFORMATION

14.1 DOT (US)

Not regulated in the meaning of transport regulations.

14.2 IMDG

Not regulated in the meaning of transport regulations.

14.3 IATA

Not regulated in the meaning of transport regulations.

UN number	Not Applicable
UN proper shipping name	Not Applicable
Transport hazard class(es)	Not Applicable
Packing group	Not Applicable

SECTION 15. REGULATORY INFORMATION

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

Substances of Very High Concern	None.
Substance subject to authorisation per REACH Annex XIV	None
Restricted substances under EC 1907/2006, Annex XVII	None.
Substances listed under Annex I of Regulation (EC) No 689/2008	None.
Restricted substances under Annex V of Regulation (EC) No 689/2008	None

15.2 Environmental hazards

Guanidine hydrochloride	Hazard class 1 - slightly hazardous to water
-------------------------	--

SECTION 16. OTHER INFORMATION

Key to abbreviations and acronyms

STOT-SE: Specific Target Organ Toxicity - Single Exposure

STOT-RE: Specific Target Organ Toxicity - Repeated Exposure

PBT: Persistent Bioaccumulative and Toxic

vPvB: very Persistent very Bioaccumulative and toxic

ADR: European Agreement concerning the international carriage of Dangerous goods by Road

CAS: Chemical Abstracts Service

IARC: International Agency for Research on Cancer

IATA: International Air Transport Association

IMDG: International Maritime code for Dangerous Goods

REACH: Registration, Evaluation, Authorization and restriction of Chemicals

RID: Regulations concerning the International transport of Dangerous goods by rail

Safety Data Sheet (SDS)

Revision Date:
26 March 2022

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers

Product Name: Wash Buffer 1
Product Code: E2090
CAS Number: -
EC Number: -

1.2 Details of the supplier of the safety data sheet

Company: EcoTech Biotechnology
Address: Universite Mah. İpekyolu Cad. Ata Teknokent A.Ş. B Blok No: 20/113 Yakutiye/Erzurum
Türkiye
Tel/Fax: 0090 442 282 20 44
Emergency
phone number: 0090 553 828 76 90

1.3 Product use

For research use only. Not intended for diagnostic or therapeutic use.

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

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

Physical hazards	Not Hazardous
Health hazards	Not Hazardous
Environmental hazards	Not Hazardous

2.2 Label elements

Symbols/Pictograms	None
Signal word	None
Hazard statements	Not Applicable
Precautionary Statements - Prevention	Not Applicable
Precautionary Statements - Response	Not Applicable

2.3 Other hazards

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

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Product Name

Wash Buffer 1

Synonyms: -
Concentration: -
Formula: -
Molecular Weight: -

This product is a mixture.

3.2 Mixture

Chemical Name	CAS No	Weight %
Sodium Acetate	127-09-3	20-25

SECTION 4. FIRST AID MEASURES

4.1 Description of first aid measures

Eye contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Skin Contact	Rinse skin with water. Immediate medical attention is not required.
Inhalation	Not expected to be an inhalation hazard under anticipated conditions of normal use of this material. Consult a physician if necessary.
Ingestion	Not expected to present a significant ingestion hazard under anticipated conditions of normal use. If you feel unwell, seek medical advice.
Self-protection of the first aider	Use personal protective equipment as required.

Most important symptoms and effects, both acute and delayed

Symptoms Not Applicable

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing Media	Water spray. Carbon dioxide (CO ₂). Foam. Dry chemical.
Unsuitable Extinguishing	No information available

5.2 Special hazards arising from the substance or mixture

Specific hazards arising from the chemical Carbon oxides Sodium oxides Combustible. Development of hazardous combustion gases or vapours possible in the event of fire.

5.3 Explosion data

Sensitivity to Mechanical Impact	No information available.
Sensitivity to Static Discharge	No information available.

5.4 Protective equipment and precautions for firefighters

Advice for firefighters Standard procedure for chemical fires.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, consult an expert.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up Soak up with inert absorbent material.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Use personal protective equipment as required. No special handling advices are necessary.

7.2 Conditions for safe storage, including any incompatibilities

Keep tightly closed. Store in a cool, dry, well-ventilated area away from incompatible substances. Keep in properly labelled containers.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Ingredients with workplace control parameters.

8.2 Exposure controls

Engineering measures

Ensure adequate ventilation, especially in confined areas.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. When using, do not eat, drink or smoke.

Wash hands, forearms and face after handling.

Personal protective equipment

Eye/face protection: Tight sealing safety goggles.

Hand protection: Wear suitable gloves Glove material: Compatible chemical-resistant gloves.

Skin and body protection: Wear laboratory coat or impervious clothing. Choose appropriate body protection according to the amount and concentration of the substance at the work place.

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

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

a) Appearance:	Liquid
b) Odor:	No data available
c) Odor Threshold:	No data available
d) pH:	No data available
e) Melting point/freezing point:	No data available
f) Initial boiling point and boiling range:	No data available
g) Flash point:	No data available
h) Evaporation rate:	No data available
i) Flammability (solid, gas):	No data available
j) Upper / lower flammability or explosive limits:	No data available
k) Vapor pressure:	No data available
l) Vapor density:	No data available
m) Relative density:	No data available
n) Solubility(ies):	No data available
o) Partition coefficient: <i>n</i> -octanol / water:	No data available
p) Auto-ignition temperature:	No data available
q) Decomposition temperature:	No data available
r) Viscosity:	No data available
s) Explosive properties:	No data available
t) Oxidizing properties:	No data available

SECTION 10. STABILITY AND REACTIVITY

Stability and reactivity

Reactivity: None known.

Chemical stability: Stable at a cool and dry place.

Possibility of hazardous reactions: Hazardous reaction has not been reported.

Conditions to avoid: No information available.

Incompatible materials: No dangerous reaction known under conditions of normal use.

Hazardous decomposition products: No data available.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

a) Acute toxicity:

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sodium Acetate	2700 mg/kg (Rat)	>20000 mg/kg	>5.6 mg/L 14h (Rat)

		(Rabbit)	
--	--	----------	--

b) Skin corrosion / irritation:	Data are conclusive but insufficient for classification.
c) Serious eye damage/eye irritation:	Data are conclusive but insufficient for classification.
d) Carcinogenicity:	Data are conclusive but insufficient for classification.
e) Reproductive toxicity:	Data are conclusive but insufficient for classification.
f) STOT - SE:	Data are conclusive but insufficient for classification.
g) STOT - RE:	Data are conclusive but insufficient for classification.
h) Aspiration hazard:	Data are conclusive but insufficient for classification.

11.2 Potential health effects

Ingestion:	May be harmful if swallowed.
Inhalation:	May be harmful if inhaled. May cause respiratory tract irritation.
Skin:	May be harmful if absorbed through skin. May cause skin irritation.
Eyes:	May cause eye irritation.

11.3 Additional Information

No additional information is available

SECTION 12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity

Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Product

Contact a licensed professional waste disposal service to dispose of this material. Dispose of in accordance with federal, state and local requirements.

Contaminated packaging

Dispose of as unused product. Do not reuse empty containers.

Section 14. TRANSPORT INFORMATION

14.1 DOT (US)

Not dangerous goods.

14.2 IMDG

Not dangerous goods.

14.3 IATA

Not dangerous goods.

UN number	Not Applicable
UN proper shipping name	Not Applicable
Transport hazard class(es)	Not Applicable
Packing group	Not Applicable

SECTION 15. REGULATORY INFORMATION

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

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.2 Environmental hazards

Not Applicable

15.3 Chemical safety assessment

No Chemical safety assessment has been carried out.

SECTION 16. OTHER INFORMATION

Key to abbreviations and acronyms

STOT-SE: Specific Target Organ Toxicity - Single Exposure

STOT-RE: Specific Target Organ Toxicity - Repeated Exposure

PBT: Persistent Bioaccumulative and Toxic

vPvB: very Persistent very Bioaccumulative and toxic

ADR: European Agreement concerning the international carriage of Dangerous goods by Road

CAS: Chemical Abstracts Service

IARC: International Agency for Research on Cancer

IATA: International Air Transport Association

IMDG: International Maritime code for Dangerous Goods

REACH: Registration, Evaluation, Authorization and restriction of Chemicals

RID: Regulations concerning the International transport of Dangerous goods by rail

Safety Data Sheet (SDS)

Revision Date:
26 March 2022

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers

Product Name: Wash Buffer 2 (concentrated)
Product Code: E2090
CAS Number: -
EC Number: -

1.2 Details of the supplier of the safety data sheet

Company: EcoTech Biotechnology
Address: Universite Mah. İpekyolu Cad. Ata Teknokent A.Ş. B Blok No: 20/113 Yakutiye/Erzurum
Türkiye
Tel/Fax: 0090 442 282 20 44
Emergency
phone number: 0090 553 828 76 90

1.3 Product use

For research use only. Not intended for diagnostic or therapeutic use.

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

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

Physical hazards	Not Hazardous
Health hazards	Not Hazardous
Environmental hazards	Not Hazardous

2.2 Label elements

Symbols/Pictograms	None
Signal word	None
Hazard statements	Not Applicable
Precautionary Statements - Prevention	Not Applicable
Precautionary Statements - Response	Not Applicable

2.3 Other hazards

Not Applicable

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Product Name

Wash Buffer 2 (concentrated)
Synonyms: -
Concentration: concentrated
Formula: -
Molecular Weight: -
This product is a mixture.

3.2 Mixture

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	If symptoms persist, call a physician.
Eye contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Skin Contact	Rinse skin with water. Immediate medical attention is not required.
Inhalation	Not expected to be an inhalation hazard under anticipated conditions of normal use of this material. Consult a physician if necessary.
Ingestion	Not expected to present a significant ingestion hazard under anticipated conditions of normal use. If you feel unwell, seek medical advice.
Self-protection of the first aider	Use personal protective equipment as required.

Most important symptoms and effects, both acute and delayed

Symptoms Not Applicable

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing Media	Water spray. Carbon dioxide (CO ₂). Foam. Dry chemical.
Unsuitable Extinguishing	No information available

5.2 Special hazards arising from the substance or mixture

Specific hazards arising from the chemical	Not known
--	-----------

5.3 Explosion data

Sensitivity to Mechanical Impact	No information available.
Sensitivity to Static Discharge	No information available.

5.4 Protective equipment and precautions for firefighters

Advice for firefighters	Standard procedure for chemical fires.
-------------------------	--

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Always wear recommended Personal Protective Equipment. Use personal protection equipment

6.2 Environmental precautions

No special environmental precautions required.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up	Soak up with inert absorbent material.
-------------------------	--

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Use personal protective equipment as required. No special handling advices are necessary.

7.2 Conditions for safe storage, including any incompatibilities

Keep tightly closed. Store in a cool, dry, well-ventilated area away from incompatible substances.
Keep in properly labelled containers.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Engineering measures

Ensure adequate ventilation, especially in confined areas.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. When using, do not eat, drink or smoke.

Wash hands, forearms and face after handling.

Personal protective equipment

Eye/face protection: Tight sealing safety goggles.

Hand protection: Wear suitable gloves Glove material: Compatible chemical-resistant gloves.

Skin and body protection: Wear laboratory coat or impervious clothing. Choose appropriate body protection according to the amount and concentration of the substance at the work place.

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

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

a) Appearance:	Liquid
b) Odor:	No data available
c) Odor Threshold:	No data available
d) pH:	7.5
e) Melting point/freezing point:	No data available
f) Initial boiling point and boiling range:	No data available
g) Flash point:	No data available
h) Evaporation rate:	No data available
i) Flammability (solid, gas):	No data available
j) Upper / lower flammability or explosive limits:	No data available
k) Vapor pressure:	No data available
l) Vapor density:	No data available
m) Relative density:	No data available
n) Solubility(ies):	No data available
o) Partition coefficient: <i>n</i> -octanol / water:	No data available
p) Auto-ignition temperature:	No data available
q) Decomposition temperature:	No data available
r) Viscosity:	No data available
s) Explosive properties:	No data available
t) Oxidizing properties:	No data available

SECTION 10. STABILITY AND REACTIVITY

Stability and reactivity

Reactivity: None known.

Chemical stability: Stable at a cool and dry place.

Possibility of hazardous reactions: Hazardous reaction has not been reported.

Conditions to avoid: No information available.

Incompatible materials: No dangerous reaction known under conditions of normal use.

Hazardous decomposition products: No data available.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

a) Acute toxicity:	There is no evidence available indicating acute toxicity.
b) Skin corrosion / irritation:	Data are conclusive but insufficient for classification.
c) Serious eye damage/eye irritation:	Data are conclusive but insufficient for classification.
d) Carcinogenicity:	Data are conclusive but insufficient for classification.
e) Reproductive toxicity:	Data are conclusive but insufficient for classification.
f) STOT - SE:	Data are conclusive but insufficient for classification.

- g) STOT - RE: Data are conclusive but insufficient for classification.
h) Aspiration hazard: Data are conclusive but insufficient for classification.

11.2 Potential health effects

Ingestion: May be harmful if swallowed.
Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.
Skin: May be harmful if absorbed through skin. May cause skin irritation.
Eyes: May cause eye irritation.

11.3 Additional Information

No additional information is available

SECTION 12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity

Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Product

Contact a licensed professional waste disposal service to dispose of this material. Dispose of in accordance with federal, state and local requirements.

Contaminated packaging

Dispose of as unused product. Do not reuse empty containers.

Section 14. TRANSPORT INFORMATION

14.1 DOT (US)

Not regulated in the meaning of transport regulations.

14.2 IMDG

Not regulated in the meaning of transport regulations

14.3 IATA

Not regulated in the meaning of transport regulations

UN number	Not Applicable
UN proper shipping name	Not Applicable
Transport hazard class(es)	Not Applicable
Packing group	Not Applicable

SECTION 15. REGULATORY INFORMATION

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

Substances of Very High Concern	None.
Substance subject to authorisation per REACH Annex XIV	None
Restricted substances under EC 1907/2006, Annex XVII	None.
Substances listed under Annex I of Regulation (EC) No 689/2008	None.
Restricted substances under Annex V of Regulation (EC) No 689/2008	None.

15.2 Environmental hazards

Not Applicable

15.3 Chemical safety assessment

No Chemical safety assessment has been carried out.

SECTION 16. OTHER INFORMATION

Key to abbreviations and acronyms

STOT-SE: Specific Target Organ Toxicity - Single Exposure

STOT-RE: Specific Target Organ Toxicity - Repeated Exposure

PBT: Persistent Bioaccumulative and Toxic

vPvB: very Persistent very Bioaccumulative and toxic

ADR: European Agreement concerning the international carriage of Dangerous goods by Road

CAS: Chemical Abstracts Service

IARC: International Agency for Research on Cancer

IATA: International Air Transport Association

IMDG: International Maritime code for Dangerous Goods

REACH: Registration, Evaluation, Authorization and restriction of Chemicals

RID: Regulations concerning the International transport of Dangerous goods by rail