Safety data sheet

EcoBGD-50x | KIT COMPONENTS

Product code EcoBGD-50x	Revision v1 / 25 October 2026
Document type Combined component MSDS	Number of components 7

Contents

Each reagent below has a separate 16-section safety data sheet.

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Safety identification

Binding Buffer and Wash Buffer 1 (concentrate): GHS07 (H302, H315, H319, H332). Proteinase K and RNase A: GHS08 (H334). Other components are not classified as hazardous in Section 2.

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

The hazard classification of each component applies to that component only; this document does not classify the assembled kit as a single chemical mixture.

Safety data sheet

Binding Buffer

Product name Binding Buffer	Catalog no. EcoBGD-50x
Synonyms -	Original issue 01 April 2022
CAS no. -	Revision / date v1 / 25 October 2026

01 PRODUCT AND COMPANY IDENTIFICATION

Product identifier	Binding Buffer
Product code	EcoBGD-50x
CAS number	-
EC number	-
Recommended use	Binding Buffer reagent in EcoTech EcoBGD-50x research kit. For research use only; not for diagnostic or therapeutic use.
Supplier	EcoTech Biotechnology
Website	www.ecotechbiotech.com
Address	Universite Mah. İpekyolu Cad. Ata Teknokent Sitesi B Blok No: Z10 Yakutiye Erzurum Türkiye
Telephone	0090 544 327 34 97
SDS contact	info@ecotechbiotech.com
Emergency telephone	0090 544 327 34 97
Available	Monday-Saturday/08:00-20:00/GMT+3
Languages	Turkish/English
Outside these hours	Contact: info@ecotechbiotech.com

02 HAZARDS IDENTIFICATION

GHS/CLP classification	Acute Tox. 4 (oral); Acute Tox. 4 (inhalation); Skin Irrit. 2; Eye Irrit. 2 (CLP).
Hazard statements	H302 - Harmful if swallowed. H315 - Causes skin irritation. H319 - Causes serious eye irritation. H332 - Harmful if inhaled.
GHS pictograms	
Signal word	Warning
Precautionary statements - prevention	P264 - Wash hands thoroughly after handling. P270 - Do not eat, drink or smoke when using this product. P280 - Wear protective gloves, clothing and eye/face protection.
Precautionary statements - response	P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or physician. P302+P352 - IF ON SKIN: Wash with plenty of soap and water. P305+P351+P338 - IF IN EYES: Rinse cautiously with water; remove contact lenses if possible. P330 - Rinse mouth. P332+P313 - If skin irritation occurs: Get medical advice.
Other hazards	Contact with acids or bleach can liberate toxic gases; never combine with bleach-containing waste.

Composition & response

Binding Buffer | SAFETY DATA SHEET / SECTIONS 03-05

03 COMPOSITION / INFORMATION ON INGREDIENTS

Product name	Binding Buffer
Synonyms	-
Concentration	-
Formula	-
Molecular weight	-
Product form	Liquid mixture
Composition / ingredient information	Guanidine hydrochloride (CAS 50-01-1): 60-80% by weight.

04 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	Wash with plenty of soap and water. If irritation occurs, seek medical advice.
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	H302/H315/H319/H332: harmful if swallowed or inhaled; may irritate skin and eyes.
Immediate medical attention / treatment	Seek medical advice for ingestion, breathing difficulties or significant exposure.

05 FIREFIGHTING MEASURES

Suitable extinguishing media	Water spray, carbon dioxide (CO2), foam or dry chemical.
Unsuitable extinguishing media	No information available.
Special hazards arising from the product	Hazardous decomposition products include carbon oxides, nitrogen oxides and sulphur oxides; avoid contact with acids or bleach.
Explosion data	No information on mechanical impact or static discharge sensitivity.
Advice for firefighters	Wear appropriate protective gear and self-contained breathing apparatus where necessary.

Safe use & protection

Binding Buffer | SAFETY DATA SHEET / SECTIONS 06-08

06 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	Use personal protective equipment, avoid eye and skin contact and ensure adequate ventilation.
Environmental precautions	No special environmental precautions specified.
Methods and materials for containment and cleaning up	Absorb with inert absorbent material and collect in labelled containers.
Reference to other sections	Refer to Section 8 for PPE and Section 13 for waste handling.

07 HANDLING AND STORAGE

Precautions for safe handling	Wear gloves and protective eyewear; avoid ingestion, inhalation and contact with eyes/skin. Keep away from acids and bleach.
Conditions for safe storage	Keep tightly closed in a cool, dry, well-ventilated area away from incompatible substances; keep properly labelled.
Container labelling	Keep in properly labelled containers, closed when not in use.

08 EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

No product-specific occupational exposure limit values are identified.

8.2 Exposure controls

Engineering measures	Ensure adequate ventilation, particularly in enclosed work areas.
Hygiene measures	Do not eat, drink or smoke while handling. Wash hands, forearms and face after handling.
Eye / face protection	Tight-sealing safety goggles.
Hand protection	Compatible chemical-resistant protective gloves.
Skin and body protection	Laboratory coat or other protective clothing suitable for the exposure conditions.
Respiratory protection	Use suitable respiratory protection if ventilation is inadequate.

Material properties

Binding Buffer | SAFETY DATA SHEET / SECTIONS 09-10

09 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Liquid
Odor	No data available
Odor threshold	No data available
pH	4.4
Melting point / freezing point	No data available
Initial boiling point and boiling range	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper / lower flammability or explosive limits	No data available
Vapor pressure	No data available
Vapor density	No data available
Relative density	No data available
Solubility(ies)	No data available
Partition coefficient: n-octanol / water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

10 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 mix with bleach-containing liquid waste.
Incompatible materials	No dangerous reaction known under conditions of normal use.
Hazardous decomposition products	Carbon oxides. Nitrogen oxides (NOx). Sulphur oxides.

Health & environment

Binding Buffer | SAFETY DATA SHEET / SECTIONS 11-13

11 TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity	Guanidine hydrochloride: LD50 oral 354 mg/kg (rat); LD50 dermal 1,100 mg/kg; LC50 inhalation 11 mg/L, 4 h (as reported).
Skin corrosion / irritation	Skin irritation reported.
Serious eye damage / eye irritation	Irritating to eyes.
Carcinogenicity	Data are conclusive but insufficient for classification.
Reproductive toxicity	Data are conclusive but insufficient for classification.
STOT - SE	Data are conclusive but insufficient for classification.
STOT - RE	Data are conclusive but insufficient for classification.
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 and irritate the respiratory tract.
Skin: May cause irritation.
Eyes: May cause eye irritation.

11.3 Additional information

No additional toxicological information available.

12 ECOLOGICAL INFORMATION

Ecotoxicity	Environmental impact of this mixture has not been fully investigated. Guanidine hydrochloride is described as slightly hazardous to water.
Persistence and degradability	No data available
Bioaccumulative potential	No data available
Mobility in soil	No data available
Results of PBT and vPvB assessment	No information available.

13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product	Use a licensed professional waste disposal service as appropriate. Follow all applicable local and national requirements.
Contaminated packaging	Dispose of as unused product. Do not reuse empty containers.

Transport & reference

Binding Buffer | SAFETY DATA SHEET / SECTIONS 14-16

14 TRANSPORT INFORMATION

Mode	UN no.	UN proper shipping name	Hazard class	Packing group	Env. hazard
ADR/RID	-	Not regulated as dangerous goods	-	-	No
IMDG	-	Not regulated as dangerous goods	-	-	No
IATA	-	Not regulated as dangerous goods	-	-	No

- = not assigned or not applicable.

Special precautions for user	Follow standard laboratory transport and packaging precautions.
Transport in bulk according to MARPOL / IBC	Not applicable.

15 REGULATORY INFORMATION

Safety, health and environmental regulations / legislation	The EU REACH / CLP framework applies as relevant to the supplied mixture or substance. No additional specific authorisations or restrictions are identified in the supplied regulatory entries.
Environmental hazards	Guanidine hydrochloride: slightly hazardous to water (reported hazard class 1).
Chemical safety assessment	No chemical safety assessment is reported for the product.

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 and very bioaccumulative
ADR	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 Dangerous Goods Code
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	International transport of dangerous goods by rail

Safety data sheet

Elution Buffer

Product name Elution Buffer	Catalog no. EcoBGD-50x
Synonyms -	Original issue 01 April 2022
CAS no. -	Revision / date v1 / 25 October 2026

01 PRODUCT AND COMPANY IDENTIFICATION

Product identifier	Elution Buffer
Product code	EcoBGD-50x
CAS number	-
EC number	-
Recommended use	Elution Buffer reagent in EcoTech EcoBGD-50x research kit. For research use only; not for diagnostic or therapeutic use.
Supplier	EcoTech Biotechnology
Website	www.ecotechbiotech.com
Address	Universite Mah. İpekyolu Cad. Ata Teknokent Sitesi B Blok No: Z10 Yakutiye Erzurum Türkiye
Telephone	0090 544 327 34 97
SDS contact	info@ecotechbiotech.com
Emergency telephone	0090 544 327 34 97
Available	Monday-Saturday/08:00-20:00/GMT+3
Languages	Turkish/English
Outside these hours	Contact: info@ecotechbiotech.com

02 HAZARDS IDENTIFICATION

GHS/CLP classification	Not classified as hazardous under Regulation (EC) No. 1272/2008 (CLP).
Hazard statements	None
GHS pictograms	None
Signal word	None
Precautionary statements - prevention	Standard laboratory hygiene and personal protective equipment.
Precautionary statements - response	Rinse exposed eyes or skin with water; seek medical advice if symptoms persist.
Other hazards	No other hazards identified.

Composition & response

Elution Buffer | SAFETY DATA SHEET / SECTIONS 03-05

03 COMPOSITION / INFORMATION ON INGREDIENTS

Product name	Elution Buffer
Synonyms	-
Concentration	-
Formula	-
Molecular weight	-
Product form	Liquid mixture
Composition / ingredient information	No components requiring disclosure are identified in the supplied composition details.

04 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	No specific symptoms provided.
Immediate medical attention / treatment	Treat symptomatically; obtain medical advice if symptoms persist.

05 FIREFIGHTING MEASURES

Suitable extinguishing media	Water spray, carbon dioxide (CO2), foam or dry chemical.
Unsuitable extinguishing media	No information available.
Special hazards arising from the product	No specific fire or explosion hazard has been identified.
Explosion data	No information on mechanical impact or static discharge sensitivity.
Advice for firefighters	Wear appropriate protective gear and self-contained breathing apparatus where necessary.

Safe use & protection

Elution Buffer | SAFETY DATA SHEET / SECTIONS 06-08

06 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	Use personal protective equipment, avoid eye and skin contact and ensure adequate ventilation.
Environmental precautions	No special environmental precautions specified.
Methods and materials for containment and cleaning up	Absorb with inert absorbent material and collect in labelled containers.
Reference to other sections	Refer to Section 8 for PPE and Section 13 for waste handling.

07 HANDLING AND STORAGE

Precautions for safe handling	Handle with standard laboratory hygiene, suitable PPE and adequate ventilation.
Conditions for safe storage	Keep tightly closed in a cool, dry, well-ventilated area, away from incompatible substances, in labelled containers.
Container labelling	Keep in properly labelled containers, closed when not in use.

08 EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

No product-specific occupational exposure limit values are identified.

8.2 Exposure controls

Engineering measures	Ensure adequate ventilation, particularly in enclosed work areas.
Hygiene measures	Do not eat, drink or smoke while handling. Wash hands, forearms and face after handling.
Eye / face protection	Tight-sealing safety goggles.
Hand protection	Chemical-resistant protective gloves; inspect gloves before use.
Skin and body protection	Laboratory coat or other protective clothing suitable for the exposure conditions.
Respiratory protection	Use suitable respiratory protection if ventilation is inadequate.

Material properties

Elution Buffer | SAFETY DATA SHEET / SECTIONS 09-10

09 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Liquid
Odor	No data available
Odor threshold	No data available
pH	8.5
Melting point / freezing point	No data available
Initial boiling point and boiling range	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper / lower flammability or explosive limits	No data available
Vapor pressure	No data available
Vapor density	No data available
Relative density	No data available
Solubility(ies)	No data available
Partition coefficient: n-octanol / water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

10 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.

Health & environment

Elution Buffer | SAFETY DATA SHEET / SECTIONS 11-13

11 TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity	There is no evidence available indicating acute toxicity.
Skin corrosion / irritation	Data are conclusive but insufficient for classification.
Serious eye damage / eye irritation	Data are conclusive but insufficient for classification.
Carcinogenicity	Data are conclusive but insufficient for classification.
Reproductive toxicity	Data are conclusive but insufficient for classification.
STOT - SE	Data are conclusive but insufficient for classification.
STOT - RE	Data are conclusive but insufficient for classification.
Aspiration hazard	Data are conclusive but insufficient for classification.

11.2 Potential health effects

No mixture-specific adverse health effects reported; follow good laboratory hygiene.

11.3 Additional information

No additional toxicological information available.

12 ECOLOGICAL INFORMATION

Ecotoxicity	Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.
Persistence and degradability	No data available
Bioaccumulative potential	No data available
Mobility in soil	No data available
Results of PBT and vPvB assessment	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product	Use a licensed professional waste disposal service as appropriate. Follow all applicable local and national requirements.
Contaminated packaging	Dispose of as unused product. Do not reuse empty containers.

Transport & reference

Elution Buffer | SAFETY DATA SHEET / SECTIONS 14-16

14 TRANSPORT INFORMATION

Mode	UN no.	UN proper shipping name	Hazard class	Packing group	Env. hazard
ADR/RID	-	Not regulated as dangerous goods	-	-	No
IMDG	-	Not regulated as dangerous goods	-	-	No
IATA	-	Not regulated as dangerous goods	-	-	No

- = not assigned or not applicable.

Special precautions for user	Follow standard laboratory transport and packaging precautions.
Transport in bulk according to MARPOL / IBC	Not applicable.

15 REGULATORY INFORMATION

Safety, health and environmental regulations / legislation	The EU REACH / CLP framework applies as relevant to the supplied mixture or substance. No additional specific authorisations or restrictions are identified in the supplied regulatory entries.
Environmental hazards	See Section 12 for available ecological data.
Chemical safety assessment	No chemical safety assessment is reported for the product.

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 and very bioaccumulative
ADR	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 Dangerous Goods Code
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	International transport of dangerous goods by rail

Safety data sheet

Lysis Buffer

Product name Lysis Buffer	Catalog no. EcoBGD-50x
Synonyms -	Original issue 01 April 2022
CAS no. -	Revision / date v1 / 25 October 2026

01 PRODUCT AND COMPANY IDENTIFICATION

Product identifier	Lysis Buffer
Product code	EcoBGD-50x
CAS number	-
EC number	-
Recommended use	Lysis Buffer reagent in EcoTech EcoBGD-50x research kit. For research use only; not for diagnostic or therapeutic use.
Supplier	EcoTech Biotechnology
Website	www.ecotechbiotech.com
Address	Universite Mah. İpekyolu Cad. Ata Teknokent Sitesi B Blok No: Z10 Yakutiye Erzurum Türkiye
Telephone	0090 544 327 34 97
SDS contact	info@ecotechbiotech.com
Emergency telephone	0090 544 327 34 97
Available	Monday-Saturday/08:00-20:00/GMT+3
Languages	Turkish/English
Outside these hours	Contact: info@ecotechbiotech.com

02 HAZARDS IDENTIFICATION

GHS/CLP classification	Not classified as hazardous under Regulation (EC) No. 1272/2008 (CLP) in the product classification.
Hazard statements	None (according to available mixture classification)
GHS pictograms	None
Signal word	None
Precautionary statements - prevention	Use suitable laboratory PPE, avoid contact with skin and eyes, and ensure ventilation.
Precautionary statements - response	Rinse eyes and skin thoroughly; seek advice if symptoms occur.
Other hazards	The toxicology section reports serious eye damage; review of whole-mixture hazard classification is required.

Composition & response

Lysis Buffer | SAFETY DATA SHEET / SECTIONS 03-05

03 COMPOSITION / INFORMATION ON INGREDIENTS

Product name	Lysis Buffer
Synonyms	-
Concentration	-
Formula	-
Molecular weight	-
Product form	Liquid mixture
Composition / ingredient information	No reportable ingredients are disclosed in the composition section. Toxicology information lists sodium dodecyl sulfate without stating its concentration.

04 FIRST AID MEASURES

4.1 Description of first aid measures

Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician. Immediately flush with plenty of water.
Skin contact	Wash off immediately with plenty of water for at least 15 minutes. Wash contaminated clothing before reuse.
Inhalation	If breathed in, move person into fresh air. Seek medical advice if discomfort occurs.
Ingestion	Rinse mouth. Drink plenty of water. Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Seek medical attention.
Self-protection of the first aider	Use personal protective equipment as required.
Most important symptoms and effects	No specific symptoms provided.
Immediate medical attention / treatment	Treat symptomatically; obtain medical advice if symptoms persist.

05 FIREFIGHTING MEASURES

Suitable extinguishing media	Use extinguishing media appropriate for the surrounding fire.
Unsuitable extinguishing media	No information available.
Special hazards arising from the product	No specific fire or explosion hazard has been identified.
Explosion data	No information on mechanical impact or static discharge sensitivity.
Advice for firefighters	Wear appropriate protective gear and self-contained breathing apparatus where necessary.

Safe use & protection

Lysis Buffer | SAFETY DATA SHEET / SECTIONS 06-08

06 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	Use personal protective equipment, avoid eye and skin contact and ensure adequate ventilation.
Environmental precautions	Prevent significant releases to drains and waterways.
Methods and materials for containment and cleaning up	Collect material in suitable closed containers; prevent discharge to drains.
Reference to other sections	Refer to Section 8 for PPE and Section 13 for waste handling.

07 HANDLING AND STORAGE

Precautions for safe handling	Ensure good ventilation, avoid eye and skin contact, and wear suitable protective equipment.
Conditions for safe storage	Keep tightly closed in a dry, well-ventilated area. Recommended storage temperature: 22-25 degrees C.
Container labelling	Keep in properly labelled containers, closed when not in use.

08 EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

No product-specific occupational exposure limit values are identified.

8.2 Exposure controls

Engineering measures	Ensure adequate ventilation, particularly in enclosed work areas.
Hygiene measures	Do not eat, drink or smoke while handling. Wash hands, forearms and face after handling.
Eye / face protection	Safety glasses with side shields conforming to EN 166.
Hand protection	Chemical-resistant protective gloves; inspect gloves before use.
Skin and body protection	Laboratory coat or other protective clothing suitable for the exposure conditions.
Respiratory protection	Use suitable respiratory protection if ventilation is inadequate.

Material properties

Lysis Buffer | SAFETY DATA SHEET / SECTIONS 09-10

09 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Liquid
Odor	Odorless
Odor threshold	No data available
pH	No data available
Melting point / freezing point	No data available
Initial boiling point and boiling range	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper / lower flammability or explosive limits	No data available
Vapor pressure	No data available
Vapor density	No data available
Relative density	No data available
Solubility(ies)	No data available
Partition coefficient: n-octanol / water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

10 STABILITY AND REACTIVITY

Reactivity	Stable
Chemical stability	Stable at a cool and dry place.
Possibility of hazardous reactions	No data available
Conditions to avoid	No data available
Incompatible materials	Oxidizing agents
Hazardous decomposition products	No data available

Health & environment

Lysis Buffer | SAFETY DATA SHEET / SECTIONS 11-13

11 TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity	Sodium dodecyl sulfate (ingredient): LD50 oral 1,288 mg/kg (rat); dermal 580 mg/kg (rabbit); inhalation 3,900 mg/m3 (rat, 1 h). No concentration or whole-mixture test value supplied.
Skin corrosion / irritation	No skin/corrosion irritation data available.
Serious eye damage / eye irritation	Serious eye damage is reported in the ingredient toxicology narrative; check the whole-mixture classification.
Carcinogenicity	None of the ingredients is listed.
Reproductive toxicity	No data available
STOT - SE	No data available
STOT - RE	No data available
Aspiration hazard	No data available

11.2 Potential health effects

Ingestion: May be harmful if swallowed.
Inhalation: May be harmful if inhaled and may irritate the respiratory tract.
Skin: May cause irritation.
Eyes: Irritation and serious eye damage are described in the toxicology data.

11.3 Additional information

No additional toxicological information available.

12 ECOLOGICAL INFORMATION

Ecotoxicity	Mixture-specific aquatic toxicity is not established. Sodium dodecyl sulfate ingredient 96-h fish LC50 results range from 1.31 to 22.8 mg/L in the listed studies.
Persistence and degradability	No data available
Bioaccumulative potential	No data available
Mobility in soil	No data available
Results of PBT and vPvB assessment	PBT/vPvB assessment not available as chemical safety assessment is not required/was not conducted.

13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product	Use a licensed professional waste disposal service as appropriate. Follow all applicable local and national requirements.
Contaminated packaging	Dispose of as unused product. Do not reuse empty containers.

Transport & reference

Lysis Buffer | SAFETY DATA SHEET / SECTIONS 14-16

14 TRANSPORT INFORMATION

Mode	UN no.	UN proper shipping name	Hazard class	Packing group	Env. hazard
ADR/RID	-	Not regulated as dangerous goods	-	-	No
IMDG	-	Not regulated as dangerous goods	-	-	No
IATA	-	Not regulated as dangerous goods	-	-	No

- = not assigned or not applicable.

Special precautions for user	Follow standard laboratory transport and packaging precautions.
Transport in bulk according to MARPOL / IBC	Not applicable.

15 REGULATORY INFORMATION

Safety, health and environmental regulations / legislation	The EU REACH / CLP framework applies as relevant to the supplied mixture or substance. No additional specific authorisations or restrictions are identified in the supplied regulatory entries.
Environmental hazards	See Section 12 for available ecological data.
Chemical safety assessment	No chemical safety assessment is reported for the product.

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 and very bioaccumulative
ADR	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 Dangerous Goods Code
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	International transport of dangerous goods by rail

Safety data sheet

Proteinase K

Product name Proteinase K	Catalog no. EcoBGD-50x
Synonyms Proteinase, Tritirachium album	Original issue 01 April 2022
CAS no. 39450-01-6	Revision / date v1 / 25 October 2026

01 PRODUCT AND COMPANY IDENTIFICATION

Product identifier	Proteinase K
Product code	EcoBGD-50x
CAS number	39450-01-6
EC number	-
Recommended use	Proteinase K reagent in EcoTech EcoBGD-50x research kit. For research use only; not for diagnostic or therapeutic use.
Supplier	EcoTech Biotechnology
Website	www.ecotechbiotech.com
Address	Universite Mah. İpekyolu Cad. Ata Teknokent Sitesi B Blok No: Z10 Yakutiye Erzurum Türkiye
Telephone	0090 544 327 34 97
SDS contact	info@ecotechbiotech.com
Emergency telephone	0090 544 327 34 97
Available	Monday-Saturday/08:00-20:00/GMT+3
Languages	Turkish/English
Outside these hours	Contact: info@ecotechbiotech.com

02 HAZARDS IDENTIFICATION

GHS/CLP classification	Respiratory Sensitization, Category 1 (Resp. Sens. 1; H334) under CLP.
Hazard statements	H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.
GHS pictograms	
Signal word	Danger
Precautionary statements - prevention	P261 - Avoid breathing dust, fume, gas, mist, vapour or spray. P284 - Wear respiratory protection.
Precautionary statements - response	IF INHALED: Move to fresh air. If respiratory symptoms occur, contact a POISON CENTER or physician.
Other hazards	Possible respiratory sensitizer. Avoid generating or inhaling dust.

Composition & response

Proteinase K | SAFETY DATA SHEET / SECTIONS 03-05

03 COMPOSITION / INFORMATION ON INGREDIENTS

Product name	Proteinase K
Synonyms	Proteinase, Tritirachium album
Concentration	<= 100%
Formula	-
Molecular weight	-
Product form	White lyophilized powder
Composition / ingredient information	Proteinase K / proteinase from Tritirachium album (CAS 39450-01-6): <= 100%. Ingredient hazard classes: Skin Irrit. 2 (H315); Eye Irrit. 2 (H319); Resp. Sens. 1 (H334).

04 FIRST AID MEASURES

4.1 Description of first aid measures

Eye contact	Immediately flush eyes with water for at least 15 minutes; seek medical attention if irritation occurs.
Skin contact	Rinse affected skin thoroughly with water.
Inhalation	Move to fresh air; keep comfortable for breathing. Seek prompt medical attention if respiratory symptoms occur (H334).
Ingestion	If unwell, seek medical advice; do not give anything by mouth to an unconscious person.
Self-protection of the first aider	Avoid breathing enzyme dust. Wear protective equipment.
Most important symptoms and effects	H334: allergy, asthma symptoms or breathing difficulties if inhaled.
Immediate medical attention / treatment	If experiencing respiratory symptoms, call a poison centre or physician.

05 FIREFIGHTING MEASURES

Suitable extinguishing media	Use extinguishing media appropriate for the surrounding fire.
Unsuitable extinguishing media	No information available.
Special hazards arising from the product	No specific decomposition products identified; prevent contaminated firefighting water from entering waterways.
Explosion data	No information on mechanical impact or static discharge sensitivity.
Advice for firefighters	Wear appropriate protective gear and self-contained breathing apparatus where necessary.

Safe use & protection

Proteinase K | SAFETY DATA SHEET / SECTIONS 06-08

06 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	Evacuate unnecessary personnel. Avoid dust generation and breathing enzyme dust; ensure adequate ventilation and use suitable PPE.
Environmental precautions	Prevent significant releases to drains and waterways.
Methods and materials for containment and cleaning up	Contain and collect in suitable closed containers for disposal; avoid creating airborne dust.
Reference to other sections	Refer to Section 8 for PPE and Section 13 for waste handling.

07 HANDLING AND STORAGE

Precautions for safe handling	Work in a ventilated enclosure where practical; avoid inhalation of enzyme dust. Do not eat, drink or smoke during handling.
Conditions for safe storage	Keep tightly closed and protect from light. Follow the temperature and conditions on the product label.
Container labelling	Keep in properly labelled containers, closed when not in use.

08 EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

No product-specific occupational exposure limit values are identified.

8.2 Exposure controls

Engineering measures	Ensure adequate ventilation, particularly in enclosed work areas.
Hygiene measures	Do not eat, drink or smoke while handling. Wash hands, forearms and face after handling.
Eye / face protection	Safety glasses with side shields conforming to EN 166.
Hand protection	Chemical-resistant protective gloves; inspect gloves before use.
Skin and body protection	Laboratory coat or other protective clothing suitable for the exposure conditions.
Respiratory protection	Avoid inhaling enzyme dust; wear appropriate respiratory protection when exposure cannot be controlled.

Material properties

Proteinase K | SAFETY DATA SHEET / SECTIONS 09-10

09 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	White lyophilized powder.
Odor	No data available
Odor threshold	No data available
pH	No data available
Melting point / freezing point	No data available
Initial boiling point and boiling range	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper / lower flammability or explosive limits	No data available
Vapor pressure	No data available
Vapor density	No data available
Relative density	No data available
Solubility(ies)	No data available
Partition coefficient: n-octanol / water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	None

10 STABILITY AND REACTIVITY

Reactivity	No data available
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	No data available
Conditions to avoid	No data available
Incompatible materials	No dangerous reaction known under conditions of normal use.
Hazardous decomposition products	No data available

Health & environment

Proteinase K | SAFETY DATA SHEET / SECTIONS 11-13

11 TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity	Proteinase K: oral, dermal and inhalation acute toxicity values are not available in the supplied ingredient data.
Skin corrosion / irritation	Not classified based on available information.
Serious eye damage / eye irritation	Not classified based on available information.
Carcinogenicity	Not classified based on available information.
Reproductive toxicity	Not classified based on available information.
STOT - SE	Not classified based on available information.
STOT - RE	Not classified based on available information.
Aspiration hazard	No aspiration hazard data available. Respiratory sensitization is addressed in Section 2 (H334).

11.2 Potential health effects

Inhalation may cause allergy, asthma symptoms or breathing difficulty (H334). Other exposure routes may be harmful; rinse exposed skin and eyes with water.

11.3 Additional information

No additional toxicological information available.

12 ECOLOGICAL INFORMATION

Ecotoxicity	No data available
Persistence and degradability	No data available
Bioaccumulative potential	No data available
Mobility in soil	No data available
Results of PBT and vPvB assessment	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.

13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product	Dispose in accordance with applicable local regulations. Wastewater disposal is permitted only where local rules explicitly allow it.
Contaminated packaging	Take empty containers to an approved waste handler. Do not reuse.

Transport & reference

Proteinase K | SAFETY DATA SHEET / SECTIONS 14-16

14 TRANSPORT INFORMATION

Mode	UN no.	UN proper shipping name	Hazard class	Packing group	Env. hazard
ADR/RID	-	Not regulated as dangerous goods	-	-	No
IMDG	-	Not regulated as dangerous goods	-	-	No
IATA	-	Not regulated as dangerous goods	-	-	No

- = not assigned or not applicable.

Special precautions for user	Follow standard laboratory transport and packaging precautions.
Transport in bulk according to MARPOL / IBC	Not applicable.

15 REGULATORY INFORMATION

Safety, health and environmental regulations / legislation	Regulation (EC) No. 1907/2006 (REACH), as applicable to this enzyme product.
Environmental hazards	See Section 12 for available ecological data.
Chemical safety assessment	No chemical safety assessment is reported for the product.

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 and very bioaccumulative
ADR	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 Dangerous Goods Code
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	International transport of dangerous goods by rail

Safety data sheet

RNase A

Product name RNase A	Catalog no. EcoBGD-50x
Synonyms Bovine pancreatic ribonuclease	Original issue 01 April 2022
CAS no. 9001-99-4	Revision / date v1 / 25 October 2026

01 PRODUCT AND COMPANY IDENTIFICATION

Product identifier	RNase A
Product code	EcoBGD-50x
CAS number	9001-99-4
EC number	232-646-6
Recommended use	RNase A reagent in EcoTech EcoBGD-50x research kit. For research use only; not for diagnostic or therapeutic use.
Supplier	EcoTech Biotechnology
Website	www.ecotechbiotech.com
Address	Universite Mah. İpekyolu Cad. Ata Teknokent Sitesi B Blok No: Z10 Yakutiye Erzurum Türkiye
Telephone	0090 544 327 34 97
SDS contact	info@ecotechbiotech.com
Emergency telephone	0090 544 327 34 97
Available	Monday-Saturday/08:00-20:00/GMT+3
Languages	Turkish/English
Outside these hours	Contact: info@ecotechbiotech.com

02 HAZARDS IDENTIFICATION

GHS/CLP classification	Respiratory Sensitization, Category 1 (Resp. Sens. 1; H334) under CLP.
Hazard statements	H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.
GHS pictograms	
Signal word	Danger
Precautionary statements - prevention	P261 - Avoid breathing dust, fume, gas, mist, vapour or spray. P284 - Wear respiratory protection.
Precautionary statements - response	IF INHALED: Move to fresh air and contact a physician if respiratory symptoms occur. P501 - Dispose of contents/container to an approved waste disposal facility.
Other hazards	Possible respiratory sensitizer. Prevent formation and inhalation of enzyme dust.

Composition & response

RNase A | SAFETY DATA SHEET / SECTIONS 03-05

03 COMPOSITION / INFORMATION ON INGREDIENTS

Product name	RNase A
Synonyms	RNase A; Pancreatic Ribonuclease
Concentration	<= 100%
Formula	-
Molecular weight	13.683 g/mol
Product form	White lyophilized powder
Composition / ingredient information	Ribonuclease (from bovine pancreas), CAS 9001-99-4; up to 100%. Respiratory sensitizer, H334.

04 FIRST AID MEASURES

4.1 Description of first aid measures

Eye contact	Immediately flush eyes with water for at least 15 minutes; seek medical attention if irritation occurs.
Skin contact	Rinse affected skin thoroughly with water.
Inhalation	Move to fresh air and consult a physician, especially if respiratory symptoms occur.
Ingestion	Give water to drink (up to two glasses) if conscious. Consult a physician.
Self-protection of the first aider	Avoid inhaling enzyme dust and use suitable protective equipment.
Most important symptoms and effects	H334: allergy, asthma symptoms or breathing difficulties if inhaled.
Immediate medical attention / treatment	If experiencing respiratory symptoms, call a poison centre or physician.

05 FIREFIGHTING MEASURES

Suitable extinguishing media	Use extinguishing media appropriate for the surrounding fire.
Unsuitable extinguishing media	No information available.
Special hazards arising from the product	No specific decomposition products identified; prevent contaminated firefighting water from entering waterways.
Explosion data	No information on mechanical impact or static discharge sensitivity.
Advice for firefighters	Wear appropriate protective gear and self-contained breathing apparatus where necessary.

Safe use & protection

RNase A | SAFETY DATA SHEET / SECTIONS 06-08

06 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	Evacuate unnecessary personnel. Avoid dust generation and breathing enzyme dust; ensure adequate ventilation and use suitable PPE.
Environmental precautions	Prevent significant releases to drains and waterways.
Methods and materials for containment and cleaning up	Contain and collect in suitable closed containers for disposal; avoid creating airborne dust.
Reference to other sections	Refer to Section 8 for PPE and Section 13 for waste handling.

07 HANDLING AND STORAGE

Precautions for safe handling	Work in a ventilated enclosure where practical; avoid inhalation of enzyme dust. Do not eat, drink or smoke during handling.
Conditions for safe storage	Keep tightly closed and protect from light. Observe conditions given on product labelling.
Container labelling	Keep in properly labelled containers, closed when not in use.

08 EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

No product-specific occupational exposure limit values are identified.

8.2 Exposure controls

Engineering measures	Ensure adequate ventilation, particularly in enclosed work areas.
Hygiene measures	Do not eat, drink or smoke while handling. Wash hands, forearms and face after handling.
Eye / face protection	Safety glasses with side shields conforming to EN 166.
Hand protection	Chemical-resistant protective gloves; inspect gloves before use.
Skin and body protection	Laboratory coat or other protective clothing suitable for the exposure conditions.
Respiratory protection	Normally not required where airborne dust is absent; use respiratory protection meeting relevant standards when dust is generated.

Material properties

RNase A | SAFETY DATA SHEET / SECTIONS 09-10

09 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	White lyophilized powder.
Odor	No data available
Odor threshold	No data available
pH	No data available
Melting point / freezing point	No data available
Initial boiling point and boiling range	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper / lower flammability or explosive limits	No data available
Vapor pressure	No data available
Vapor density	No data available
Relative density	No data available
Solubility(ies)	No data available
Partition coefficient: n-octanol / water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	None

10 STABILITY AND REACTIVITY

Reactivity	Fine powders of organic materials, when dispersed in air, may present a dust explosion hazard.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	No data available
Conditions to avoid	No data available
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No data available

Health & environment

RNase A | SAFETY DATA SHEET / SECTIONS 11-13

11 TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity	Not classified based on available information.
Skin corrosion / irritation	Not classified based on available information.
Serious eye damage / eye irritation	Not classified based on available information.
Carcinogenicity	Not classified based on available information.
Reproductive toxicity	Not classified based on available information.
STOT - SE	Not classified based on available information.
STOT - RE	Not classified based on available information.
Aspiration hazard	Not classified based on available information. Respiratory sensitisation is addressed in Section 2 (H334).

11.2 Potential health effects

Inhalation may cause allergy, asthma symptoms or breathing difficulty (H334). Other exposure routes may be harmful; rinse exposed skin and eyes with water.

11.3 Additional information

No additional toxicological information available.

12 ECOLOGICAL INFORMATION

Ecotoxicity	No data available
Persistence and degradability	No data available
Bioaccumulative potential	No data available
Mobility in soil	No data available
Results of PBT and vPvB assessment	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.

13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product	Wastewater disposal only where explicitly permitted by local regulations; otherwise use an authorised disposal route.
Contaminated packaging	Take empty containers to an approved waste handler. Do not reuse.

Transport & reference

RNase A | SAFETY DATA SHEET / SECTIONS 14-16

14 TRANSPORT INFORMATION

Mode	UN no.	UN proper shipping name	Hazard class	Packing group	Env. hazard
ADR/RID	-	Not regulated as dangerous goods	-	-	No
IMDG	-	Not regulated as dangerous goods	-	-	No
IATA	-	Not regulated as dangerous goods	-	-	No

- = not assigned or not applicable.

Special precautions for user	Follow standard laboratory transport and packaging precautions.
Transport in bulk according to MARPOL / IBC	Not applicable.

15 REGULATORY INFORMATION

Safety, health and environmental regulations / legislation	Regulation (EC) No. 1907/2006 (REACH) as applicable to this enzyme.
Environmental hazards	See Section 12 for available ecological data.
Chemical safety assessment	No chemical safety assessment is reported for the product.

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 and very bioaccumulative
ADR	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 Dangerous Goods Code
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	International transport of dangerous goods by rail

Safety data sheet

Wash Buffer 1 (concentrate)

Product name Wash Buffer 1 (concentrate)	Catalog no. EcoBGD-50x
Synonyms -	Original issue 01 April 2022
CAS no. -	Revision / date v1 / 25 October 2026

01 PRODUCT AND COMPANY IDENTIFICATION

Product identifier	Wash Buffer 1 (concentrate)
Product code	EcoBGD-50x
CAS number	-
EC number	-
Recommended use	Wash Buffer 1 (concentrate) reagent in EcoTech EcoBGD-50x research kit. For research use only; not for diagnostic or therapeutic use.
Supplier	EcoTech Biotechnology
Website	www.ecotechbiotech.com
Address	Universite Mah. İpekyolu Cad. Ata Teknokent Sitesi B Blok No: Z10 Yakutiye Erzurum Türkiye
Telephone	0090 544 327 34 97
SDS contact	info@ecotechbiotech.com
Emergency telephone	0090 544 327 34 97
Available	Monday-Saturday/08:00-20:00/GMT+3
Languages	Turkish/English
Outside these hours	Contact: info@ecotechbiotech.com

02 HAZARDS IDENTIFICATION

GHS/CLP classification	Acute Tox. 4 (oral); Acute Tox. 4 (inhalation); Skin Irrit. 2; Eye Irrit. 2 (CLP).
Hazard statements	H302 - Harmful if swallowed. H315 - Causes skin irritation. H319 - Causes serious eye irritation. H332 - Harmful if inhaled.
GHS pictograms	
Signal word	Warning
Precautionary statements - prevention	P264 - Wash hands thoroughly after handling. P270 - Do not eat, drink or smoke when using this product. P280 - Wear protective gloves, clothing and eye/face protection.
Precautionary statements - response	P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or physician. P302+P352 - IF ON SKIN: Wash with plenty of soap and water. P305+P351+P338 - IF IN EYES: Rinse cautiously with water; remove contact lenses if possible. P330 - Rinse mouth. P332+P313 - If skin irritation occurs: Get medical advice.
Other hazards	Contact with acids or bleach can liberate toxic gases; never combine with bleach-containing waste.

Composition & response

Wash Buffer 1 (concentrate) | SAFETY DATA SHEET / SECTIONS 03-05

03 COMPOSITION / INFORMATION ON INGREDIENTS

Product name	Wash Buffer 1 (concentrate)
Synonyms	Wash Buffer 2
Concentration	Concentrate
Formula	-
Molecular weight	-
Product form	Liquid mixture
Composition / ingredient information	Guanidine hydrochloride (CAS 50-01-1): 60-70% by weight.

04 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	No specific symptoms provided.
Immediate medical attention / treatment	Treat symptomatically; obtain medical advice if symptoms persist.

05 FIREFIGHTING MEASURES

Suitable extinguishing media	Water spray, carbon dioxide (CO2), foam or dry chemical.
Unsuitable extinguishing media	No information available.
Special hazards arising from the product	No specific fire or explosion hazard has been identified.
Explosion data	No information on mechanical impact or static discharge sensitivity.
Advice for firefighters	Wear appropriate protective gear and self-contained breathing apparatus where necessary.

Safe use & protection

Wash Buffer 1 (concentrate) | SAFETY DATA SHEET / SECTIONS 06-08

06 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	Use personal protective equipment, avoid eye and skin contact and ensure adequate ventilation.
Environmental precautions	No special environmental precautions specified.
Methods and materials for containment and cleaning up	Absorb with inert absorbent material and collect in labelled containers.
Reference to other sections	Refer to Section 8 for PPE and Section 13 for waste handling.

07 HANDLING AND STORAGE

Precautions for safe handling	Handle with standard laboratory hygiene, suitable PPE and adequate ventilation.
Conditions for safe storage	Keep tightly closed in a cool, dry, well-ventilated place and in properly labelled containers.
Container labelling	Keep in properly labelled containers, closed when not in use.

08 EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

No product-specific occupational exposure limit values are identified.

8.2 Exposure controls

Engineering measures	Ensure adequate ventilation, particularly in enclosed work areas.
Hygiene measures	Do not eat, drink or smoke while handling. Wash hands, forearms and face after handling.
Eye / face protection	Tight-sealing safety goggles.
Hand protection	Chemical-resistant protective gloves; inspect gloves before use.
Skin and body protection	Laboratory coat or other protective clothing suitable for the exposure conditions.
Respiratory protection	Use suitable respiratory protection if ventilation is inadequate.

Material properties

Wash Buffer 1 (concentrate) | SAFETY DATA SHEET / SECTIONS 09-10

09 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Liquid
Odor	No data available
Odor threshold	No data available
pH	4.8
Melting point / freezing point	No data available
Initial boiling point and boiling range	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper / lower flammability or explosive limits	No data available
Vapor pressure	No data available
Vapor density	No data available
Relative density	No data available
Solubility(ies)	No data available
Partition coefficient: n-octanol / water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

10 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	Contact with acids or bleach liberates toxic gases. Do not add acids or bleach to liquid wastes containing this product.
Incompatible materials	No dangerous reaction known under conditions of normal use.
Hazardous decomposition products	Carbon oxides, nitrogen oxides (NOx), sulphur oxides.

Health & environment

Wash Buffer 1 (concentrate) | SAFETY DATA SHEET / SECTIONS 11-13

11 TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity	Guanidine hydrochloride: LD50 oral 354 mg/kg (rat); LD50 dermal 1,100 mg/kg; LC50 inhalation 11 mg/L, 4 h.
Skin corrosion / irritation	Skin irritation.
Serious eye damage / eye irritation	Irritating to eyes.
Carcinogenicity	Data are conclusive but insufficient for classification.
Reproductive toxicity	Data are conclusive but insufficient for classification.
STOT - SE	Data are conclusive but insufficient for classification.
STOT - RE	Data are conclusive but insufficient for classification.
Aspiration hazard	Data are conclusive but insufficient for classification.

11.2 Potential health effects

No mixture-specific toxicity data; irritation may occur following exposure.

11.3 Additional information

No additional toxicological information available.

12 ECOLOGICAL INFORMATION

Ecotoxicity	Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.
Persistence and degradability	No data available
Bioaccumulative potential	No data available
Mobility in soil	No data available
Results of PBT and vPvB assessment	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product	Use a licensed professional waste disposal service as appropriate. Follow all applicable local and national requirements.
Contaminated packaging	Dispose of as unused product. Do not reuse empty containers.

Transport & reference

Wash Buffer 1 (concentrate) | SAFETY DATA SHEET / SECTIONS 14-16

14 TRANSPORT INFORMATION

Mode	UN no.	UN proper shipping name	Hazard class	Packing group	Env. hazard
ADR/RID	-	Not regulated as dangerous goods	-	-	No
IMDG	-	Not regulated as dangerous goods	-	-	No
IATA	-	Not regulated as dangerous goods	-	-	No

- = not assigned or not applicable.

Special precautions for user	Follow standard laboratory transport and packaging precautions.
Transport in bulk according to MARPOL / IBC	Not applicable.

15 REGULATORY INFORMATION

Safety, health and environmental regulations / legislation	The EU REACH / CLP framework applies as relevant to the supplied mixture or substance. No additional specific authorisations or restrictions are identified in the supplied regulatory entries.
Environmental hazards	Guanidine hydrochloride: slightly hazardous to water (water hazard class 1).
Chemical safety assessment	No chemical safety assessment is reported for the product.

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 and very bioaccumulative
ADR	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 Dangerous Goods Code
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	International transport of dangerous goods by rail

Safety data sheet

Wash Buffer 2 (concentrated)

Product name Wash Buffer 2 (concentrated)	Catalog no. EcoBGD-50x
Synonyms -	Original issue 01 April 2022
CAS no. -	Revision / date v1 / 25 October 2026

01 PRODUCT AND COMPANY IDENTIFICATION

Product identifier	Wash Buffer 2 (concentrated)
Product code	EcoBGD-50x
CAS number	-
EC number	-
Recommended use	Wash Buffer 2 (concentrated) reagent in EcoTech EcoBGD-50x research kit. For research use only; not for diagnostic or therapeutic use.
Supplier	EcoTech Biotechnology
Website	www.ecotechbiotech.com
Address	Universite Mah. İpekyolu Cad. Ata Teknokent Sitesi B Blok No: Z10 Yakutiye Erzurum Türkiye
Telephone	0090 544 327 34 97
SDS contact	info@ecotechbiotech.com
Emergency telephone	0090 544 327 34 97
Available	Monday-Saturday/08:00-20:00/GMT+3
Languages	Turkish/English
Outside these hours	Contact: info@ecotechbiotech.com

02 HAZARDS IDENTIFICATION

GHS/CLP classification	Not classified as hazardous under Regulation (EC) No. 1272/2008 (CLP).
Hazard statements	None
GHS pictograms	None
Signal word	None
Precautionary statements - prevention	Use good laboratory hygiene and standard personal protective equipment.
Precautionary statements - response	Rinse exposed skin or eyes thoroughly; seek medical advice if symptoms persist.
Other hazards	No other hazards identified.

Composition & response

Wash Buffer 2 (concentrated) | SAFETY DATA SHEET / SECTIONS 03-05

03 COMPOSITION / INFORMATION ON INGREDIENTS

Product name	Wash Buffer 2 (concentrated)
Synonyms	Wash Buffer 2
Concentration	Concentrated
Formula	-
Molecular weight	-
Product form	Liquid mixture
Composition / ingredient information	No components requiring disclosure are identified in the supplied composition details.

04 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	No specific symptoms provided.
Immediate medical attention / treatment	Treat symptomatically; obtain medical advice if symptoms persist.

05 FIREFIGHTING MEASURES

Suitable extinguishing media	Water spray, carbon dioxide (CO2), foam or dry chemical.
Unsuitable extinguishing media	No information available.
Special hazards arising from the product	No specific fire or explosion hazard has been identified.
Explosion data	No information on mechanical impact or static discharge sensitivity.
Advice for firefighters	Wear appropriate protective gear and self-contained breathing apparatus where necessary.

Safe use & protection

Wash Buffer 2 (concentrated) | SAFETY DATA SHEET / SECTIONS 06-08

06 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	Use personal protective equipment, avoid eye and skin contact and ensure adequate ventilation.
Environmental precautions	No special environmental precautions specified.
Methods and materials for containment and cleaning up	Absorb with inert absorbent material and collect in labelled containers.
Reference to other sections	Refer to Section 8 for PPE and Section 13 for waste handling.

07 HANDLING AND STORAGE

Precautions for safe handling	Handle with standard laboratory hygiene, suitable PPE and adequate ventilation.
Conditions for safe storage	Keep tightly closed in a cool, dry, well-ventilated place and in properly labelled containers.
Container labelling	Keep in properly labelled containers, closed when not in use.

08 EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

No product-specific occupational exposure limit values are identified.

8.2 Exposure controls

Engineering measures	Ensure adequate ventilation, particularly in enclosed work areas.
Hygiene measures	Do not eat, drink or smoke while handling. Wash hands, forearms and face after handling.
Eye / face protection	Tight-sealing safety goggles.
Hand protection	Chemical-resistant protective gloves; inspect gloves before use.
Skin and body protection	Laboratory coat or other protective clothing suitable for the exposure conditions.
Respiratory protection	Use suitable respiratory protection if ventilation is inadequate.

Material properties

Wash Buffer 2 (concentrated) | SAFETY DATA SHEET / SECTIONS 09-10

09 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Liquid
Odor	No data available
Odor threshold	No data available
pH	7.5
Melting point / freezing point	No data available
Initial boiling point and boiling range	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper / lower flammability or explosive limits	No data available
Vapor pressure	No data available
Vapor density	No data available
Relative density	No data available
Solubility(ies)	No data available
Partition coefficient: n-octanol / water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

10 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.

Health & environment

Wash Buffer 2 (concentrated) | SAFETY DATA SHEET / SECTIONS 11-13

11 TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity	There is no evidence available indicating acute toxicity.
Skin corrosion / irritation	Data are conclusive but insufficient for classification.
Serious eye damage / eye irritation	Data are conclusive but insufficient for classification.
Carcinogenicity	Data are conclusive but insufficient for classification.
Reproductive toxicity	Data are conclusive but insufficient for classification.
STOT - SE	Data are conclusive but insufficient for classification.
STOT - RE	Data are conclusive but insufficient for classification.
Aspiration hazard	Data are conclusive but insufficient for classification.

11.2 Potential health effects

No mixture-specific toxicity data; irritation may occur following exposure.

11.3 Additional information

No additional toxicological information available.

12 ECOLOGICAL INFORMATION

Ecotoxicity	Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.
Persistence and degradability	No data available
Bioaccumulative potential	No data available
Mobility in soil	No data available
Results of PBT and vPvB assessment	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product	Use a licensed professional waste disposal service as appropriate. Follow all applicable local and national requirements.
Contaminated packaging	Dispose of as unused product. Do not reuse empty containers.

Transport & reference

Wash Buffer 2 (concentrated) | SAFETY DATA SHEET / SECTIONS 14-16

14 TRANSPORT INFORMATION

Mode	UN no.	UN proper shipping name	Hazard class	Packing group	Env. hazard
ADR/RID	-	Not regulated as dangerous goods	-	-	No
IMDG	-	Not regulated as dangerous goods	-	-	No
IATA	-	Not regulated as dangerous goods	-	-	No

- = not assigned or not applicable.

Special precautions for user	Follow standard laboratory transport and packaging precautions.
Transport in bulk according to MARPOL / IBC	Not applicable.

15 REGULATORY INFORMATION

Safety, health and environmental regulations / legislation	The EU REACH / CLP framework applies as relevant to the supplied mixture or substance. No additional specific authorisations or restrictions are identified in the supplied regulatory entries.
Environmental hazards	See Section 12 for available ecological data.
Chemical safety assessment	No chemical safety assessment is reported for the product.

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 and very bioaccumulative
ADR	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 Dangerous Goods Code
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	International transport of dangerous goods by rail