46117 Landing Parkway, Fremont, CA 94538 U.S.A.
Tel: 1-510-265-1027; Fax: 1-510-265-1352

btinfo@biotium.com
http://www.biotium.com/

SAFETY DATA SHEET

Date: April 18, 2022

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: CELLDATA Wash Buffer
Catalog Number: 99864
Unit Size: 12 mL
Manufacturer/Supplier: Biotium, Inc.
46117 Landing Parkway, Fremont, CA 94538, USA
Phone: 1-510-265-1027, Fax: 1-510-265-1352
Web: http://www.biotium.com

Use as laboratory reagent. For research use only. Not for food, drug, household, or cosmetic use.

2. HAZARDS IDENTIFICATION

GHS Classification None
Signal word None
Health hazards None
Physical hazards None
Hazard statements None
Precautionary statements None
GHS hazard pictogram None

WHMIS classification None

NFPA Rating
Health hazard: 0
Fire: 0
Reactivity Hazard: 0

Classification according to Regulation (EC) No 1272/2008[CLP] None
Labeling according to Regulation (EC) No 1272/2008[CLP]
Hazard pictogram None
Signal word None
Hazard statements None
Precautionary statements None

3. COMPOSITION/INFORMATION ON INGREDIENTS

No components present at concentrations classified as hazardous to health or the environment.

4. FIRST- AID MEASURES

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact
Wash off with soap and plenty of water. Consult a physician.
In case of eye contact
Flush eyes with water as a precaution.
If swallowed
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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5. FIREFIGHTING MEASURES

Suitable extinguishing media
Carbon dioxide, dry chemical extinguishers, foam extinguishers or water.
Special protective equipment for firefighters
Wear self contained breathing apparatus for firefighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions
Avoid breathing vapors, mist or gas. Remove all sources of ignition.
Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Methods and materials for containment and cleaning up
Contain spillage. Soak up spilled substance with inert absorbent material. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling
Avoid inhalation of vapor or mist.
Avoid direct contact with substance.
Conditions for safe storage
Keep container tightly closed in a dry and well-ventilated place.
Store at room temperature

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters
None
Personal protective equipment
Hand protection
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
Respiratory protection
Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Eye protection
Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Hygiene measures
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Chemical Name	CELLDATA Wash Buffer
Appearance	Liquid
Odor	Odorless
Odor threshold	No data available
pH	7-8
Melting point/freezing point	No data available
Boiling point	No data available
Flash point	No data available
Evaporate rate	No data available
Flammability	No data available
Explosive limits	No data available

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Vapor pressure	No data available
Vapor density	No data available
Relative density	No data available
Solubility	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

Chemical stability
Stable under recommended storage conditions.
Possibility of hazardous reactions
No data available
Conditions to avoid
Heat, flames and sparks.
Materials to avoid
No data available
Hazardous decomposition products
Hazardous decomposition products formed under fire conditions. - Carbon oxides
Other decomposition products - No data available

11. TOXICOLOGICAL INFORMATION

Acute toxicity
Oral LD50 None
Inhalation LC50 None
Dermal LD50 None
Other information on acute toxicity No data available
Skin corrosion/irritation No data available
Serious eye damage/eye irritation No data available
Respiratory or skin sensitization No data available
Germ cell mutagenicity No data available
Carcinogenicity
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Reproductive toxicity No data available
Specific target organ toxicity - single exposure (Globally Harmonized System)
No data available
Specific target organ toxicity - repeated exposure (Globally Harmonized System)
No data available
Aspiration hazard
No data available
Potential health effects
Inhalation May be harmful if inhaled. May cause respiratory tract irritation.
Ingestion May be harmful if swallowed.
Skin May be harmful if absorbed through skin. May cause skin irritation.
Eyes May cause eye irritation.
Additional Information

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RTECS: None

12. ECOLOGICAL INFORMATION

Toxicity No information available
Persistence and degradability No information available
Bioaccumulative potential No information available
Mobility in soil No information available
Results of PBT and vPvB assessment No information available
Other adverse effects No information available
Additional information No information available

13. DISPOSAL CONSIDERATIONS

Do not dispose product directly into sewage. Consult local state or national regulation for proper disposal.

14. TRANSPORT INFORMATION

IATA, IMDG, DOT (US), TDG Not dangerous goods during transportation
UN number None
UN proper shipping name None
Transport hazard class None
Packing group None
Environmental hazards None
Transport in bulk according to Annex II of MARPOL 73/78 and IBC Code None
Special precaution for user None

15. REGULATION INFORTMATION

US Federal Regulations
US Toxic Substances Control Act (TSCA): Not listed
SARA 302: No chemicals were found.
SARA 313: No chemicals were found.
SARA 311/312 Hazards: No chemicals were found.

WHMIS Hazard Class None

16. OTHER INFORMATION

Classification according to Regulation (EC) Nr. 1272/2008
Refer to section 2 and section 3

Prepared by: Regulatory Department
Biotium Inc.
Version no. 3
Revision date (Initials) 4/18/22 (ET)
Reason for revision Updates to component name and catalog numbers. Update to current SDS template.

The information provided above is believed to be correct to our best knowledge, but does not purport to be all inclusive, and shall be used only as a guide. This material is sold for research purposes only and is not required to appear on the TSCA inventory. It is not intended for food, drug, household, agricultural or cosmetic use. Its use must be supervised by a technically qualified individual experienced in handling potentially hazardous chemicals. Biotium shall not be held liable for any damage resulting from handling or contact with the above product.

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SAFETY DATA SHEET

Date: April 18, 2022

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: DNAse Buffer
Catalog Number: 99865
Unit Size: 5 mL
Manufacturer/Supplier: Biotium, Inc.
46117 Landing Parkway, Fremont, CA 94538, USA
Phone: 1-510-265-1027, Fax: 1-510-265-1352
Web: http://www.biotium.com

Use as laboratory reagent. For research use only. Not for food, drug, household, or cosmetic use.

2. HAZARDS IDENTIFICATION

GHS Classification None
Signal word None
Health hazards None
Physical hazards None
Hazard statements None
Precautionary statements None
GHS hazard pictogram None

WHMIS classification None

NFPA Rating
Health hazard: 0
Fire: 0
Reactivity Hazard: 0

Classification according to Regulation (EC) No 1272/2008[CLP] None
Labeling according to Regulation (EC) No 1272/2008[CLP]
Hazard pictogram None
Signal word None
Hazard statements None
Precautionary statements None

3. COMPOSITION/INFORMATION ON INGREDIENTS

No components present at concentrations classified as hazardous to health or the environment.

4. FIRST- AID MEASURES

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact
Wash off with soap and plenty of water. Consult a physician.
In case of eye contact
Flush eyes with water as a precaution.
If swallowed
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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5. FIREFIGHTING MEASURES

Suitable extinguishing media
Carbon dioxide, dry chemical extinguishers, foam extinguishers or water.
Special protective equipment for firefighters
Wear self contained breathing apparatus for firefighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions
Avoid breathing vapors, mist or gas. Remove all sources of ignition.
Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Methods and materials for containment and cleaning up
Contain spillage. Soak up spilled substance with inert absorbent material. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling
Avoid inhalation of vapor or mist.
Avoid direct contact with substance.
Conditions for safe storage
Keep container tightly closed in a dry and well-ventilated place.
Store at room temperature.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters
None
Personal protective equipment
Hand protection
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
Respiratory protection
Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Eye protection
Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Hygiene measures
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Chemical Name	DNAse Buffer
Appearance	Liquid
Odor	Odorless
Odor threshold	No data available
pH	7-8
Melting point/freezing point	No data available
Boiling point	No data available
Flash point	No data available
Evaporate rate	No data available
Flammability	No data available
Explosive limits	No data available

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Vapor pressure	No data available
Vapor density	No data available
Relative density	No data available
Solubility	Soluble in water
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

Chemical stability
Stable under recommended storage conditions.
Possibility of hazardous reactions
No data available
Conditions to avoid
Heat, flames and sparks.
Materials to avoid
No data available
Hazardous decomposition products
Hazardous decomposition products formed under fire conditions. - Carbon oxides
Other decomposition products - No data available

11. TOXICOLOGICAL INFORMATION

Acute toxicity
Oral LD50 None
Inhalation LC50 None
Dermal LD50 None
Other information on acute toxicity No data available
Skin corrosion/irritation No data available
Serious eye damage/eye irritation No data available
Respiratory or skin sensitization No data available
Germ cell mutagenicity No data available
Carcinogenicity
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Reproductive toxicity No data available
Specific target organ toxicity - single exposure (Globally Harmonized System)
No data available
Specific target organ toxicity - repeated exposure (Globally Harmonized System)
No data available
Aspiration hazard
No data available
Potential health effects
Inhalation May be harmful if inhaled. May cause respiratory tract irritation.
Ingestion May be harmful if swallowed.
Skin May be harmful if absorbed through skin. May cause skin irritation.
Eyes May cause eye irritation.
Additional Information

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RTECS: None

12. ECOLOGICAL INFORMATION

Toxicity No information available
Persistence and degradability No information available
Bioaccumulative potential No information available
Mobility in soil No information available
Results of PBT and vPvB assessment No information available
Other adverse effects No information available
Additional information No information available

13. DISPOSAL CONSIDERATIONS

Non-hazardous waste. Consult local state or national regulation for proper disposal.

14. TRANSPORT INFORMATION

IATA, IMDG, DOT (US), TDG Not dangerous goods during transportation
UN number None
UN proper shipping name None
Transport hazard class None
Packing group None
Environmental hazards None
Transport in bulk according to Annex II of MARPOL 73/78 and IBC Code None
Special precaution for user None

15. REGULATION INFORTMATION

US Federal Regulations
US Toxic Substances Control Act (TSCA): Not listed
SARA 302: No chemicals were found.
SARA 313: No chemicals were found.
SARA 311/312 Hazards: No chemicals were found.

WHMIS Hazard Class None

16. OTHER INFORMATION

Classification according to Regulation (EC) Nr. 1272/2008
Refer to section 2 and section 3

Prepared by: Regulatory Department
Biotium Inc.
Version no. 3
Revision date (Initials) 4/18/22 (ET)
Reason for revision Updates to component name and catalog numbers. Update to current SDS template.

The information provided above is believed to be correct to our best knowledge, but does not purport to be all inclusive, and shall be used only as a guide. This material is sold for research purposes only and is not required to appear on the TSCA inventory. It is not intended for food, drug, household, agricultural or cosmetic use. Its use must be supervised by a technically qualified individual experienced in handling potentially hazardous chemicals. Biotium shall not be held liable for any damage resulting from handling or contact with the above product.

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SAFETY DATA SHEET

Date: April 25, 2022

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: RNAstorm™ Fresh Lysis Buffer
Catalog Number: 99872
Unit Size: 36 mL
Manufacturer/Supplier: Biotium, Inc.
46117 Landing Parkway, Fremont, CA 94538, USA
Phone: 1-510-265-1027, Fax: 1-510-265-1352
Web: http://www.biotium.com

Use as laboratory reagent. For research use only. Not for food, drug, household, or cosmetic use.

2. HAZARDS IDENTIFICATION

GHS Classification None
Signal word None
Health hazards None
Physical hazards None
Hazard statements None
Precautionary statements None
GHS hazard pictogram None

WHMIS classification None

NFPA Rating
Health hazard: 0
Fire: 0
Reactivity Hazard: 0

Classification according to Regulation (EC) No 1272/2008[CLP]
Acute Tox. 4
Skin Irrit. 2
Eye Irrit. 2
Labeling according to Regulation (EC) No 1272/2008[CLP]
Hazard pictogram

Signal word Warning
Hazard statements
H302 - Harmful if swallowed
H315 - Causes skin irritation
H319 - Causes serious eye irritation

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

Response
P330 - Rinse mouth.

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P312 - Call a POISON CENTER or doctor/physician if you feel unwell.
P301 + P312 - 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
P332 + P313 - IF SKIN irritation occurs: Get medical advice/attention.
P337 + P313 - IF eye irritation persists: Get medical advice/attention.
P362- Take off contaminated clothing and wash before reuse.

Disposal
P501 - Dispose of contents/ container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Name	CAS No.	EC No.	Weight **%**	Classification
Guanidine hydrochloride	50-01-1	200-002-3	10-20%	Acute Tox. 4 Skin Irrit. 2 Eye Irrit. 2

4. FIRST- AID MEASURES

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact
Wash off with soap and plenty of water. Consult a physician.
In case of eye contact
Flush eyes with water as a precaution.
If swallowed
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIREFIGHTING MEASURES

Suitable extinguishing media
Carbon dioxide, dry chemical extinguishers, foam extinguishers or water.
Special protective equipment for firefighters
Wear self contained breathing apparatus for firefighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions
Avoid breathing vapors, mist or gas. Remove all sources of ignition.
Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Methods and materials for containment and cleaning up
Contain spillage. Soak up spilled substance with inert absorbent material. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling
Avoid inhalation of vapor or mist.
Avoid direct contact with substance.
Conditions for safe storage
Keep container tightly closed in a dry and well-ventilated place.
Store at room temperature

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters
None
Personal protective equipment
Hand protection
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
Respiratory protection
Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Eye protection
Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Hygiene measures
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Chemical Name	RNAstorm™ Fresh Lysis Buffer
Appearance	Liquid
Odor	Odorless
Odor threshold	No data available
pH	5-7
Melting point/freezing point	No data available
Boiling point	No data available
Flash point	No data available
Evaporate rate	No data available
Flammability	No data available
Explosive limits	No data available
Vapor pressure	No data available
Vapor density	No data available
Relative density	No data available
Solubility	Water soluble
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

Chemical stability
Stable under recommended storage conditions.
Possibility of hazardous reactions
Contact with acids or bleach liberates toxic gases.
Conditions to avoid
Heat, flames and sparks.
Materials to avoid

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Acids or bleach.
Hazardous decomposition products
Contact with acids or bleach liberates toxic gases. Hazardous decomposition products formed under fire conditions. - Carbon oxides
Other decomposition products - No data available

11. TOXICOLOGICAL INFORMATION

Acute toxicity (guanidine hydrochloride)

Oral LD50 LD50 Oral - Rat - female - 773.6 mg/kg
(OECD Test Guideline 401)

Inhalation LC50 LC50 Inhalation - Rat - female - 4 h - 3.181 mg/l
(OECD Test Guideline 403)

Dermal LD50 LD50 Dermal - Rabbit - male and female - > 2,000 mg/kg
(OECD Test Guideline 402)

Other information on acute toxicity No data available

Skin corrosion/irritation
Skin - Rabbit
Result: Skin irritation - 24 h
(US-EPA)
Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Serious eye damage/eye irritation
Eyes - Rabbit
Result: Causes serious eye irritation.
(OECD Test Guideline 405)
Remarks: Classified according to Regulation (EU) 1272/2008, Annex VI (Table 3.1/3.2)

Respiratory or skin sensitization
Buehler Test - Guinea pig
Result: negative
(OECD Test Guideline 406)

Germ cell mutagenicity
Not mutagenic in Ames Test.
Test Type: Ames test
Test system: Salmonella typhimurium
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative

Test Type: Chromosome aberration test in vitro
Test system: Chinese hamster fibroblasts
Metabolic activation: without metabolic activation
Method: OECD Test Guideline 473
Result: negative

Test Type: In vitro mammalian cell gene mutation test
Test system: mouse lymphoma cells
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 476
Result: negative

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

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ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Reproductive toxicity No data available
Specific target organ toxicity - single exposure (Globally Harmonized System)
No data available
Specific target organ toxicity - repeated exposure (Globally Harmonized System)
No data available
Aspiration hazard
No data available
Potential health effects
Inhalation May be harmful if inhaled. May cause respiratory tract irritation.
Ingestion May be harmful if swallowed.
Skin May be harmful if absorbed through skin. May cause skin irritation.
Eyes May cause eye irritation.
Additional Information
Repeated dose toxicity - Rat - male and female - Oral - 90 Days - NOAEL (No observed adverse effect level) - 100 mg/kg
RTECS: MF4300000
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
After absorption:
The following applies to parasympathomimetic agents in general: after oral uptake and depending on the dose, these physiologically highly active substances cause salivation, rhinorrhoea, and in some cases also lacrimation, perspiration, contraction of the pupils, dizziness, vomiting, colics, diarrhoea. Risk of collapse and cardiac arrest. Inhalation of dusts and aerosols leads to the above symptoms. Respiration is accelerated at first, then slows down.
Handle in accordance with good industrial hygiene and safety practice.
Liver - Irregularities - Based on Human Evidence
Liver - Irregularities - Based on Human Evidence
RTECS: MF4300000

12. ECOLOGICAL INFORMATION

Toxicity LC50 - Leuciscus idus (Golden orfe) - 1,759 mg/l

Toxicity to daphnia and other aquatic invertebrates
static test EC50 - Daphnia magna (Water flea) - 70.2 mg/l - 48 h
(OECD Test Guideline 202)
Remarks: (in analogy to similar products)
The value is given in analogy to the following substances: Guanidinium nitrate

Toxicity to algae
static test ErC50 - Pseudokirchneriella subcapitata (green algae) - 33.5 mg/l - 72 h
(Regulation (EC) No. 440/2008, Annex, C.3)
Remarks: (in analogy to similar products)
The value is given in analogy to the following substances:Guanidinium nitrate

Toxicity to bacteria
static test EC10 - Pseudomonas putida - ca. 7,125 mg/l - 18 h
(DIN 38412)

Persistence and degradability No information available
Bioaccumulative potential No information available
Mobility in soil No information available

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Results of PBT and vPvB assessment No information available
Other adverse effects No information available
Additional information No information available

13. DISPOSAL CONSIDERATIONS

Contact with acids or bleach liberates toxic gases. DO NOT ADD acids or bleach to any liquid wastes containing this product.

Do not dispose product directly into sewage. Consult local state or national regulation for proper disposal.

14. TRANSPORT INFORMATION

IATA, IMDG, DOT (US), TDG Not dangerous goods during transportation
UN number None
UN proper shipping name None
Transport hazard class None
Packing group None
Environmental hazards None
Transport in bulk according to Annex II of MARPOL 73/78 and IBC Code None
Special precaution for user None

15. REGULATION INFORTMATION

US Federal Regulations
US Toxic Substances Control Act (TSCA): Guanidine hydrochloride
SARA 302: No chemicals were found.
SARA 313: No chemicals were found.
SARA 311/312 Hazards: Acute Health Hazard, Chronic Health Hazard

WHMIS Hazard Class None

16. OTHER INFORMATION

Classification according to Regulation (EC) Nr. 1272/2008
Refer to section 2 and section 3

Prepared by: Regulatory Department
Biotium Inc.
Version no. 2
Revision date (Initials) 4/25/22 (ET)
Reason for revision Updates to classification and labeling in sections 1 and 2. Updates to toxicological and ecological information in sections 11 and 12. Updates to component name and catalog numbers. Update to current SDS template.

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46117 Landing Parkway, Fremont, CA 94538 U.S.A.
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btinfo@biotium.com
http://www.biotium.com/

SAFETY DATA SHEET

Date: April 25, 2022

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: RNAstorm™ Fresh Binding Buffer
Catalog Number: 99873
Unit Size: 15 mL
Manufacturer/Supplier: Biotium, Inc.
46117 Landing Parkway, Fremont, CA 94538, USA
Phone: 1-510-265-1027, Fax: 1-510-265-1352
Web: http://www.biotium.com

Use as laboratory reagent. For research use only. Not for food, drug, household, or cosmetic use.

2. HAZARDS IDENTIFICATION

GHS Classification
Acute toxicity, Oral (Category 4)
Acute toxicity, Inhalation (Category 4)
Acute toxicity, Dermal (Category 4)
Skin corrosion (Category 1C)
Serious eye damage (Category 1)
Short-term (acute) aquatic hazard (Category 3)
Long-term (chronic) aquatic hazard (Category 3)
Signal word Danger
Health hazards None
Physical hazards None
Hazard statements
H302+H312+H332 - Harmful if swallowed, in contact with skin or if inhaled.
H314 - Causes severe skin burns and eye damage.
H412 - Harmful to aquatic life with long lasting effects.
Precautionary statements
P260 - Do not breathe dusts or mists.
P264 - Wash skin thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P271- Use only outdoors or in a well-ventilated area.
P273 - Avoid release to the environment.
P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301+P312+P330 - IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.
P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304+P340+P310 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.
P305+P351+P338+P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.
P363 - Wash contaminated clothing before reuse.
P405 - Store locked up.
P501 - Dispose of contents/ container to an approved waste disposal plant

GHS hazard pictogram

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WHMIS classification None

NFPA Rating
Health hazard: 0
Fire: 0
Reactivity Hazard: 0

Classification according to Regulation (EC) No 1272/2008[CLP]
Labeling according to Regulation (EC) No 1272/2008[CLP]
Hazard pictogram
Signal word None
Hazard statements None
Precautionary statements None

3. COMPOSITION/INFORMATION ON INGREDIENTS

Name	CAS No.	EC No.	Weight **%**	Classification
Guanidine thiocyanate	593-84-0	209-812-1	30-50%	GHS Classification Acute Tox. Oral 4 Acute Tox. Inhal 4 Acute Tox. Derm 4 Skin Corr. 1C Eye Dam. 1 Aquatic Acute 3 Aquatic Chronic 3

4. FIRST- AID MEASURES

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact
Wash off with soap and plenty of water. Consult a physician.
In case of eye contact
Remove contact lenses. Wash eyes with water for at least 15 minutes. Consult a physician.
If swallowed
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIREFIGHTING MEASURES

Suitable extinguishing media
Carbon dioxide, dry chemical extinguishers, foam extinguishers or water.
Special protective equipment for firefighters
Wear self contained breathing apparatus for firefighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions
Avoid breathing vapors, mist or gas. Remove all sources of ignition.
Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Methods and materials for containment and cleaning up
Contain spillage. Soak up spilled substance with inert absorbent material. Keep in suitable, closed containers for disposal.

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7. HANDLING AND STORAGE

Precautions for safe handling
Avoid inhalation of vapor or mist.
Avoid direct contact with substance.
Conditions for safe storage
Keep container tightly closed in a dry and well-ventilated place.
Store at room temperature

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters
None
Personal protective equipment
Hand protection
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
Respiratory protection
Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Eye protection
Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Hygiene measures
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Chemical Name	RNAstorm™ Fresh Binding Buffer
Appearance	Liquid
Odor	Odorless
Odor threshold	No data available
pH	5-7
Melting point/freezing point	No data available
Boiling point	No data available
Flash point	No data available
Evaporate rate	No data available
Flammability	No data available
Explosive limits	No data available
Vapor pressure	No data available
Vapor density	No data available
Relative density	No data available
Solubility	Water soluble
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

Chemical stability
Stable under recommended storage conditions.
Possibility of hazardous reactions
Contact with acids or bleach liberates toxic gases.

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Conditions to avoid
Heat, flames and sparks.
Materials to avoid
Acids or bleach.
Hazardous decomposition products
Contact with acids or bleach liberates toxic gases. Hazardous decomposition products formed under fire conditions. - Carbon oxides
Other decomposition products - No data available

11. TOXICOLOGICAL INFORMATION

Acute toxicity (Guanidine hydrochloride)

Oral LD50 LD50 Oral - Rat - female - 593 mg/kg
(OECD Test Guideline 401)
Symptoms: Possible damages:, Nausea, Vomiting

Inhalation LC50 None

Dermal LD50 None

Other information on acute toxicity None

Skin corrosion/irritation Skin - Rabbit
Result: Corrosive after 1 to 4 hours of exposure - 4 h
(OECD Test Guideline 404)

Serious eye damage/eye irritation Causes serious eye damage.

Respiratory or skin sensitization No data available

Germ cell mutagenicity
Test Type: Ames test
Test system: S. typhimurium
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative
Test Type: Mutagenicity (mammal cell test): chromosome aberration.
Test system: Human lymphocytes
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 473
Result: negative
Test Type: Mutagenicity (mammal cell test): chromosome aberration.
Test system: Chinese hamster fibroblasts
Metabolic activation: without metabolic activation
Method: OECD Test Guideline 473
Result: negative
Test Type: In vitro mammalian cell gene mutation test
Test system: mouse lymphoma cells
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 476
Result: negative

Carcinogenicity
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity No data available

Specific target organ toxicity - single exposure (Globally Harmonized System)
No data available

Specific target organ toxicity - repeated exposure (Globally Harmonized System)
No data available

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Aspiration hazard
No data available
Potential health effects
Inhalation May be harmful if inhaled. May cause respiratory tract irritation.
Ingestion May be harmful if swallowed.
Skin May be harmful if absorbed through skin. May cause skin irritation.
Eyes May cause eye irritation.
Additional Information
RTECS: None

12. ECOLOGICAL INFORMATION

Toxicity
Toxicity to fish
static test LC50 - Poecilia reticulata (guppy) - ca. 89.1 mg/l - 96 h (OECD Test Guideline 203)
Toxicity to daphnia and other aquatic invertebrates
static test EC50 - Daphnia magna (Water flea) - 42.4 mg/l - 48 h (OECD Test Guideline 202)
Toxicity to algae
static test ErC50 - Desmodesmus subspicatus (green algae) - 130
mg/l - 72 h (DIN 38412)
Toxicity to bacteria
static test EC50 - activated sludge - > 185 mg/l - 28 h Remarks: (ECHA)
Persistence and degradability
Biodegradability
aerobic Dissolved organic carbon (DOC) - Exposure time 28 d
Result: 46 % - Inherently biodegradable.
Bioaccumulative potential No information available
Mobility in soil No information available
Results of PBT and vPvB assessment No information available
Other adverse effects No information available
Additional information No information available

13. DISPOSAL CONSIDERATIONS

Do not dispose product directly into sewage. Consult local state or national regulation for proper disposal.

14. TRANSPORT INFORMATION

IATA, IMDG, DOT (US), TDG
UN number 1759
UN proper shipping name Corrosive solids, n.o.s. (guanidinium, thiocyanate (1:1))
Transport hazard class 8
Packing group Packing group: III
Environmental hazards None
Transport in bulk according to Annex II of MARPOL 73/78 and IBC Code N/A
Special precaution for user None

15. REGULATION INFORTMATION

US Federal Regulations
US Toxic Substances Control Act (TSCA): Thiocyanic acid, compd. with guanidine (1:1): Listed
SARA 302: No chemicals were found.
SARA 313: No chemicals were found.
SARA 311/312: No chemicals were found

WHMIS Hazard Class None

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16. OTHER INFORMATION

Classification according to Regulation (EC) Nr. 1272/2008
Refer to section 2 and section 3

Prepared by:	Regulatory Department Biotium Inc.
Version no.	2
Revision date (Initials)	4/25/22 ET
Reason for revision	Updates to classification and labeling in sections 1 and 2. Updates to toxicological and ecological information in sections 11 and 12. Updates to component name and catalog numbers. Update to current SDS template.

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SAFETY DATA SHEET

Date: April 18, 2022

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: DNase I (lyophilized)
Catalog Number: 99867-600U, 99867-3000U
Unit Size: 600 U, 3000 U
Manufacturer/Supplier: Biotium, Inc.
46117 Landing Parkway, Fremont, CA 94538, USA
Phone: 1-510-265-1027, Fax: 1-510-265-1352
Web: http://www.biotium.com

Use as laboratory reagent. For research use only. Not for food, drug, household, or cosmetic use.

2. HAZARDS IDENTIFICATION

GHS Classification None
Signal word None
Health hazards None
Physical hazards None
Hazard statements None
Precautionary statements None
GHS hazard pictogram None

WHMIS classification None

NFPA Rating
Health hazard: 0
Fire: 0
Reactivity Hazard: 0

Classification according to Regulation (EC) No 1272/2008[CLP] None
Labeling according to Regulation (EC) No 1272/2008[CLP]
Hazard pictogram None
Signal word None
Hazard statements None
Precautionary statements None

3. COMPOSITION/INFORMATION ON INGREDIENTS

No components present at concentrations classified as hazardous to health or the environment.

4. FIRST- AID MEASURES

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact
Wash off with soap and plenty of water. Consult a physician.
In case of eye contact
Flush eyes with water as a precaution.
If swallowed
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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5. FIREFIGHTING MEASURES

Suitable extinguishing media
Carbon dioxide, dry chemical extinguishers, foam extinguishers or water.
Special protective equipment for firefighters
Wear self contained breathing apparatus for firefighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions
Avoid breathing vapors, mist or gas. Remove all sources of ignition.
Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Methods and materials for containment and cleaning up
Contain spillage. Soak up spilled substance with inert absorbent material. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling
Avoid inhalation of vapor or mist.
Avoid direct contact with substance.
Conditions for safe storage
Keep container tightly closed in a dry and well-ventilated place.
Store at 4°C

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters
None
Personal protective equipment
Hand protection
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
Respiratory protection
Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Eye protection
Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Hygiene measures
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Chemical Name	DNase I (lyophilized)
Appearance	Solid
Odor	Odorless
Odor threshold	No data available
pH	No data available
Melting point/freezing point	No data available
Boiling point	No data available
Flash point	No data available
Evaporate rate	No data available
Flammability	No data available

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Explosive limits	No data available
Vapor pressure	No data available
Vapor density	No data available
Relative density	No data available
Solubility	Soluble in water
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

Chemical stability
Stable under recommended storage conditions.
Possibility of hazardous reactions
No data available
Conditions to avoid
Heat, flames and sparks.
Materials to avoid
No data available
Hazardous decomposition products
Hazardous decomposition products formed under fire conditions. - Carbon oxides
Other decomposition products - No data available

11. TOXICOLOGICAL INFORMATION

Acute toxicity
Oral LD50 None
Inhalation LC50 None
Dermal LD50 None
Other information on acute toxicity No data available
Skin corrosion/irritation No data available
Serious eye damage/eye irritation No data available
Respiratory or skin sensitization No data available
Germ cell mutagenicity No data available
Carcinogenicity
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Reproductive toxicity No data available
Specific target organ toxicity - single exposure (Globally Harmonized System)
No data available
Specific target organ toxicity - repeated exposure (Globally Harmonized System)
No data available
Aspiration hazard
No data available
Potential health effects
Inhalation May be harmful if inhaled. May cause respiratory tract irritation.
Ingestion May be harmful if swallowed.
Skin May be harmful if absorbed through skin. May cause skin irritation.
Eyes May cause eye irritation.

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Additional Information
RTECS: None

12. ECOLOGICAL INFORMATION

Toxicity No information available
Persistence and degradability No information available
Bioaccumulative potential No information available
Mobility in soil No information available
Results of PBT and vPvB assessment No information available
Other adverse effects No information available
Additional information No information available

13. DISPOSAL CONSIDERATIONS

Do not dispose product directly into sewage. Consult local state or national regulation for proper disposal.

14. TRANSPORT INFORMATION

IATA, IMDG, DOT (US), TDG Not dangerous goods during transportation
UN number None
UN proper shipping name None
Transport hazard class None
Packing group None
Environmental hazards None
Transport in bulk according to Annex II of MARPOL 73/78 and IBC Code None
Special precaution for user None

15. REGULATION INFORTMATION

US Federal Regulations
US Toxic Substances Control Act (TSCA): Not listed
SARA 302: No chemicals were found.
SARA 313: No chemicals were found.
SARA 311/312 Hazards: No chemicals were found.

WHMIS Hazard Class None

16. OTHER INFORMATION

Classification according to Regulation (EC) Nr. 1272/2008
Refer to section 2 and section 3

Prepared by: Regulatory Department
Biotium Inc.
Version no. 3
Revision date (Initials) 4/18/22 (ET)
Reason for revision Updates to component name and catalog numbers. Update to current SDS template.

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