

SAFETY DATA SHEET

Revision Date: March 15, 2017

Version 1.0

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Binding Buffer

Recommended Use: Laboratory chemicals

Company: Biotium, Inc.
46117 Landing Parkway, Fremont, CA 94538, USA

Information Phone Number: 1-510-265-1027
9-4 pm PST M-F

SECTION 2. HAZARDS IDENTIFICATION

Classification of substance or mixture:

Acute oral toxicity: Category 4

Skin irritation: Category 2

Eye irritation: Category 2A

Hazard statements: H302 - Harmful if swallowed
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H335 - May cause respiratory irritation

Precautionary statements: Prevention
P264 - Wash hands thoroughly after handling
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray
P273 - Avoid release to the environment
P270 - Do not eat, drink or smoke when using this product

Response
P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P304 + P340 - IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing
 P330 - Rinse mouth

Storage

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

Disposal

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

Label Elements

Signal word:

Warning!



Carcinogenicity:

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

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No.	Concentration
Guanidine hydrochloride	50-01-1	20-50%

Contact with acids or bleach liberates toxic gases. DO NOT ADD acids or bleach to any liquid wastes containing this product. We recommend handling all chemicals with caution.

SECTION 4. FIRST AID MEASURES

Skin contact:	Wash with soap and plenty of water for several minutes. If symptoms are present, consult a physician.
Eye contact:	Remove contact lenses. Wash eyes with water for at least 15 minutes. Consult a physician.
Ingestion:	Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
Inhalation:	If breathed in, move person into fresh air.
Most important symptoms and effects, both acute and delayed:	Causes skin irritation. Causes serious eye irritation.
Notes to physician:	No information available.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media:	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Special hazards arising from the substance or mixture:	No combustion products posing significant hazards are expected from this product (an aqueous solution).
Protective equipment for firefighters:	Wear self-contained breathing apparatus for firefighting if necessary.
Additional information:	No further relevant information available.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Use appropriate protective equipment and methods to clean up spilled substance promptly. Absorb spill onto an appropriate material. Collect and dispose of all waste in accordance with applicable laws. Clean up with soap and water.

SECTION 7. HANDLING AND STORAGE

Safe handling advice:	Use good laboratory procedures; avoid eye and skin contact. See section 8 for recommended personal protective equipment.
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SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits	Contains no substances with occupational exposure limit values.
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Eye/face protection:	Use safety glasses or chemical goggles. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Skin protection:	Handle with gloves. Refer U.S. OSHA 29 CFR 1910.138, European Standard EN374 or appropriate government standards.
Respiratory protection:	In the case of vapor formation use a respirator with an approved filter.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Form:	Liquid
Color:	Colorless
Odour:	Odourless
pH:	5 - 7
Melting point:	No data available
Boiling point:	No data available
Flash point:	No data available
Vapor pressure:	No data available
Specific gravity:	No data available
Solubility:	Soluble in water
Density:	No data available

SECTION 10. STABILITY AND REACTIVITY

This material is stable under normal conditions of use.

Conditions to Avoid:	None
Materials to Avoid:	None
Hazardous Decomposition Products:	None
Possibility of Hazardous Reactions	Hazardous decomposition products formed under fire conditions. Keep away from oxidizing agents, and acidic or alkaline products.

SECTION 11. TOXICOLOGICAL INFORMATION

Product Information

Acute oral toxicity:	No data available
Acute inhalation toxicity:	No data available
Acute dermal toxicity:	No data available

Component Information

Guanidine hydrochloride

Acute oral toxicity:	LD50 Oral Rat: 1,120 mg/kg
Acute inhalation toxicity:	LC50 Inhalation - Rat - female - 4 h - 3.181 mg/l (OECD Test Guideline 403)
Acute dermal toxicity:	No data available
Skin corrosion/irritation:	Rabbit (Result: Skin irritation)
Serious eye damage/eye irritation:	Rabbit (Result: Irritating to eyes)

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity:	Toxicity to fish LC50 - Leuciscus idus (Golden orfe) - 1,759 mg/l
Mobility:	No data available.
Biodegradation:	No data available.
Bioaccumulation:	No data available.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods:	Dispose of contents/container as hazardous waste in accordance with local regulations. Contact a licensed professional waste disposal service to dispose of this material.
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SECTION 14. TRANSPORT INFORMATION

Not classified as dangerous in the meaning of transport regulations.

SECTION 15. REGULATORY INFORMATION

Component	CAS No.	US TSCA
Guanidine hydrochloride	50-01-1	Listed

US Federal Regulations

SARA 311/312:	Acute Health Hazard
SARA 302:	This product is not regulated by SARA.
SARA 313:	This product is not regulated by SARA.
Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61):	This product does not contains HAPs.

US State Regulations

California Prop 65:	This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.
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WHMIS Hazard Class

D1B Toxic materials
 D2B Toxic materials



SECTION 16. OTHER INFORMATION

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SAFETY DATA SHEET

Revision Date: March 15, 2017

Version 1.0

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: CAT5™ Reagent

Recommended Use: Laboratory chemicals

Company: Biotium, Inc.
46117 Landing Parkway, Fremont, CA 94538, USA

Information Phone Number: 1-510-265-1027
9-4 pm PST M-F

SECTION 2. HAZARDS IDENTIFICATION

Classification of substance or mixture:

GHS Not classified as hazardous.

Label Elements

GHS Not classified as hazardous.

Carcinogenicity:

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

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

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

NTP No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No.	Concentration
Sodium dodecyl sulfate	151-21-3	1-5%

SECTION 4. FIRST AID MEASURES

Skin contact:	Wash with soap and plenty of water for several minutes. Immediate medical attention is not required. If symptoms are present, consult a physician.
Eye contact:	Remove contact lenses. Wash eyes with water for at least 15 minutes. Consult a physician.
Ingestion:	Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
Inhalation:	If breathed in, move person into fresh air.
Most important symptoms and effects, both acute and delayed:	No information available.
Notes to physician:	No information available.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media:	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Special hazards arising from the substance or mixture:	No combustion products posing significant hazards are expected from this product (an aqueous solution).
Protective equipment for firefighters:	Wear self-contained breathing apparatus for firefighting if necessary.
Additional information:	No further relevant information available.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Use appropriate protective equipment and methods to clean up spilled substance promptly. Absorb spill onto an appropriate material. Collect and dispose of all waste in accordance with applicable laws. Clean up with soap and water.

SECTION 7. HANDLING AND STORAGE

Safe handling advice: Use good laboratory procedures; avoid eye and skin contact. See section 8 for recommended personal protective equipment.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits Contains no substances with occupational exposure limit values.

Eye/face protection: Use safety glasses or chemical goggles. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection: Handle with gloves. Refer U.S. OSHA 29 CFR 1910.138, European Standard EN374 or appropriate government standards.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Form:	Liquid
Color:	Colorless
Odour:	Odourless
pH:	6.4 - 7.2
Melting point:	No data available
Boiling point:	No data available
Flash point:	No data available
Vapor pressure:	No data available
Specific gravity:	No data available
Solubility:	Soluble in water
Density:	No data available

SECTION 10. STABILITY AND REACTIVITY

This material is stable under normal conditions of use.

Conditions to Avoid: None

Materials to Avoid: None

Hazardous Decomposition Products: None

SECTION 11. TOXICOLOGICAL INFORMATION

Product Information

Acute oral toxicity: No data available
 Acute inhalation toxicity: No data available
 Acute dermal toxicity: No data available

Component Information

Sodium dodecyl sulfate

Acute oral toxicity: LD50 Oral Rat: 1,228 mg/kg
 Acute inhalation toxicity: LC50 Inhalation - Rat - 1 h - > 3,900 mg/m³
 Acute dermal toxicity: No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity:

Component	Toxicity to Algae	Toxicity to Fish	Toxicity to daphnia and other aquatic invertebrates
Sodium dodecyl sulfate	Growth inhibition LOEC - <i>Pseudokirchneriella subcapitata</i> - 2.68 mg/l - 6 d static test EC50 - <i>Desmodesmus subspicatus</i> (<i>Scenedesmus subspicatus</i>) - > 120 mg/l - 72 h	flow-through test LC50 - <i>Pimephales promelas</i> (fathead minnow) - 29 mg/l - 96 h (OECD Test Guideline 203)	LC50 - <i>Daphnia dubia</i> (water flea) - 5.55 mg/l - 48 h NOEC - <i>Daphnia dubia</i> (water flea) - 0.684 mg/l - 7 d

Mobility: No data available.
 Biodegradation: No data available.
 Bioaccumulation: No data available.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods: Dispose of contents/container in accordance with local regulations.

SECTION 14. TRANSPORT INFORMATION

Not classified as dangerous in the meaning of transport regulations.

SECTION 15. REGULATORY INFORMATION

Component	CAS No.	US TSCA
Sodium dodecyl sulfate	151-21-3	Listed

US Federal Regulations

SARA 311/312: This product is not regulated by SARA.

SARA 302: This product is not regulated by SARA.

SARA 313: This product is not regulated by SARA.

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61): This product does not contains HAPs.

US State Regulations

California Prop 65: This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

WHMIS Hazard Class Non-controlled.

SECTION 16. OTHER INFORMATION

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SAFETY DATA SHEET

Revision Date: March 15, 2017
Version 1.0

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Deparaffinization Reagent
Recommended Use: Laboratory chemicals
Company: Biotium, Inc.
46117 Landing Parkway, Fremont, CA 94538, USA
Information Phone Number: 1-510-265-1027
9-4 pm PST M-F

SECTION 2. HAZARDS IDENTIFICATION

Classification of substance or mixture:

GHS Not classified as hazardous.

Label Elements

GHS Not classified as hazardous.

Carcinogenicity:

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

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

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

NTP No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No.	Concentration
Mineral oil	8042-47-5	90-100%

SECTION 4. FIRST AID MEASURES

Skin contact:	Wash with soap and plenty of water for several minutes. Immediate medical attention is not required. If symptoms are present, consult a physician.
Eye contact:	Remove contact lenses. Wash eyes with water for at least 15 minutes. Consult a physician.
Ingestion:	Not expected to present a significant ingestion hazard under anticipated conditions of normal use. If you feel unwell, seek medical advice.
Inhalation:	If breathed in, move person into fresh air.
Most important symptoms and effects, both acute and delayed:	No information available.
Notes to physician:	No information available.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media:	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Special hazards arising from the substance or mixture:	No combustion products posing significant hazards are expected from this product (an aqueous solution).
Protective equipment for firefighters:	Wear self-contained breathing apparatus for firefighting if necessary.
Additional information:	No further relevant information available.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Use appropriate protective equipment and methods to clean up spilled substance promptly. Absorb spill onto an appropriate material. Collect and dispose of all waste in accordance with applicable laws. Clean up with soap and water.

SECTION 7. HANDLING AND STORAGE

Safe handling advice: Use good laboratory procedures; avoid eye and skin contact. See section 8 for recommended personal protective equipment.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters Mineral oil
CAS No. 8042-47-5

Value: TWA
Parameter: 5.000000 mg/m³
Basis: USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants

Value: TWA
Parameter: 5.000000 mg/m³
Basis: USA. NIOSH Recommended Exposure Limits

Value: PEL
Parameter: 5 mg/m³
California permissible exposure limits for chemical contaminants (Title 8, Article 107)

Eye/face protection: Use safety glasses or chemical goggles. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection: Handle with gloves. Refer U.S. OSHA 29 CFR 1910.138, European Standard EN374 or appropriate government standards.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Form: Viscous liquid
Color: Colorless
Odour: Odourless
pH: No data available
Melting point: No data available
Boiling point: No data available
Flash point: No data available
Vapor pressure: No data available

Specific gravity:	No data available
Solubility:	No data available
Density:	No data available

SECTION 10. STABILITY AND REACTIVITY

This material is stable under normal conditions of use.

Conditions to Avoid:	None
Materials to Avoid:	None
Hazardous Decomposition Products:	None

SECTION 11. TOXICOLOGICAL INFORMATION

Product Information

Acute oral toxicity:	LD50 Oral - Rat - male and female - > 5,000 mg/kg (OECD Test Guideline 401) Effects due to ingestion may include: laxative effect, gastrointestinal disturbance.
Acute inhalation toxicity:	LC50 Inhalation - Rat - male and female - 4 h - > 5 mg/l (OECD Test Guideline 403) Aspiration may lead to: lipid pneumonia.
Acute dermal toxicity:	LD50 Dermal - Rabbit - male and female - > 2,000 mg/kg (OECD Test Guideline 402)
Repeated dose toxicity:	Rat - female - Oral - NOAEL : 1,600 mg/kg - LOAEL : 160 mg/kg - OECD Test Guideline 408

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity:	Toxicity to fish: static test LC50 - <i>Oncorhynchus mykiss</i> (rainbow trout) - > 100 mg/l - 96 h (OECD Test Guideline 203) Toxicity to daphnia and other aquatic invertebrates: static test LC50 - <i>Daphnia magna</i> (Water flea) - > 100 mg/l - 48 h (OECD Test Guideline 202)
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Mobility: No data available.

Biodegradation: No data available.

Bioaccumulation: No data available.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods: Dispose of contents/container in accordance with local regulations.

SECTION 14. TRANSPORT INFORMATION

Not classified as dangerous in the meaning of transport regulations.

SECTION 15. REGULATORY INFORMATION

US Federal Regulations

SARA 311/312: This product is not regulated by SARA.

SARA 302: This product is not regulated by SARA.

SARA 313: This product is not regulated by SARA.

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61): This product does not contains HAPs.

US State Regulations

California Prop 65: This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

WHMIS Hazard Class Non-controlled.

SECTION 16. OTHER INFORMATION

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SAFETY DATA SHEET

Revision Date: March 15, 2017

Version 1.0

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Lysis Buffer

Recommended Use: Laboratory chemicals

Company: Biotium, Inc.
46117 Landing Parkway, Fremont, CA 94538, USA

Information Phone Number: 1-510-265-1027
9-4 pm PST M-F

SECTION 2. HAZARDS IDENTIFICATION

Classification of substance or mixture:

GHS Not classified as hazardous.

Label Elements

GHS Not classified as hazardous.

Carcinogenicity:

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

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

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

NTP No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No.	Concentration
Sodium dodecyl sulfate	151-21-3	1-5%

SECTION 4. FIRST AID MEASURES

Skin contact:	Wash with soap and plenty of water for several minutes. Immediate medical attention is not required. If symptoms are present, consult a physician.
Eye contact:	Remove contact lenses. Wash eyes with water for at least 15 minutes. Consult a physician.
Ingestion:	Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
Inhalation:	If breathed in, move person into fresh air.
Most important symptoms and effects, both acute and delayed:	No information available.
Notes to physician:	No information available.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media:	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Special hazards arising from the substance or mixture:	No combustion products posing significant hazards are expected from this product (an aqueous solution).
Protective equipment for firefighters:	Wear self-contained breathing apparatus for firefighting if necessary.
Additional information:	No further relevant information available.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Use appropriate protective equipment and methods to clean up spilled substance promptly. Absorb spill onto an appropriate material. Collect and dispose of all waste in accordance with applicable laws. Clean up with soap and water.

SECTION 7. HANDLING AND STORAGE

Safe handling advice: Use good laboratory procedures; avoid eye and skin contact. See section 8 for recommended personal protective equipment.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits: Contains no substances with occupational exposure limit values.

Eye/face protection: Use safety glasses or chemical goggles. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection: Handle with gloves. Refer U.S. OSHA 29 CFR 1910.138, European Standard EN374 or appropriate government standards.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Form:	Liquid
Color:	Colorless
Odour:	Odourless
pH:	6.4 - 7.2
Melting point:	No data available
Boiling point:	No data available
Flash point:	No data available
Vapor pressure:	No data available
Specific gravity:	No data available
Solubility:	Soluble in water
Density:	No data available

SECTION 10. STABILITY AND REACTIVITY

This material is stable under normal conditions of use.

Conditions to Avoid: None

Materials to Avoid: None

Hazardous Decomposition Products: None

SECTION 11. TOXICOLOGICAL INFORMATION

Product Information

Acute oral toxicity: No data available
 Acute inhalation toxicity: No data available
 Acute dermal toxicity: No data available

Component Information

Sodium dodecyl sulfate

Acute oral toxicity: LD50 Oral Rat: 1,228 mg/kg
 Acute inhalation toxicity: LC50 Inhalation - Rat - 1 h - > 3,900 mg/m³
 Acute dermal toxicity: No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity:

Component	Toxicity to Algae	Toxicity to Fish	Toxicity to daphnia and other aquatic invertebrates
Sodium dodecyl sulfate	Growth inhibition LOEC - <i>Pseudokirchneriella subcapitata</i> - 2.68 mg/l - 6 d static test EC50 - <i>Desmodesmus subspicatus</i> (<i>Scenedesmus subspicatus</i>) - > 120 mg/l - 72 h	flow-through test LC50 - <i>Pimephales promelas</i> (fathead minnow) - 29 mg/l - 96 h (OECD Test Guideline 203)	LC50 - <i>Daphnia dubia</i> (water flea) - 5.55 mg/l - 48 h NOEC - <i>Daphnia dubia</i> (water flea) - 0.684 mg/l - 7 d

Mobility: No data available.
 Biodegradation: No data available.
 Bioaccumulation: No data available.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods: Dispose of contents/container in accordance with local regulations.

SECTION 14. TRANSPORT INFORMATION

Not classified as dangerous in the meaning of transport regulations.

SECTION 15. REGULATORY INFORMATION

Component	CAS No.	US TSCA
Sodium dodecyl sulfate	151-21-3	Listed

US Federal Regulations

SARA 311/312: This product is not regulated by SARA.

SARA 302: This product is not regulated by SARA.

SARA 313: This product is not regulated by SARA.

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61): This product does not contains HAPs.

US State Regulations

California Prop 65: This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

WHMIS Hazard Class Non-controlled.

SECTION 16. OTHER INFORMATION

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SAFETY DATA SHEET

Revision Date: March 15, 2017

Version 1.0

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Proteinase K

Recommended Use: Laboratory chemicals

Company: Biotium, Inc.
46117 Landing Parkway, Fremont, CA 94538, USA

Information Phone Number: 1-510-265-1027
9-4 pm PST M-F

SECTION 2. HAZARDS IDENTIFICATION

Classification of substance or mixture:

Acute oral toxicity: Category 4

Skin irritation: Category 2

Serious eye damage: Category 1

Respiratory sensitisation: Category 1

Specific target organ toxicity – single exposure: Category 3, Respiratory system

Acute aquatic toxicity: Category 1

Chronic aquatic toxicity: Category 2

Label Elements

Pictogram:



Signal word:

Danger

Hazard statements

H302 - Harmful if swallowed.
H315 - Causes skin irritation.
H318 - Causes serious eye damage.
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335 - May cause respiratory irritation.

H400 - Very toxic to aquatic life.

H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention

P264 - Wash hands thoroughly after handling

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

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P273 - Avoid release to the environment

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

Response

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

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

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P304 + P340 - IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing

P330 - Rinse mouth

P332 + P313 - If skin irritation occurs, get medical advice / attention.

P342 + P311 – If experiencing respiratory symptoms, call a POISON CENTER or doctor / physician.

Storage

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

Disposal

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

Carcinogenicity:

IARC

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

ACGIH

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

OSHA

No ingredient of this product present at levels greater than

or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP

No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No.	Concentration
Alkaline Protease	39450-01-6	1-10%

SECTION 4. FIRST AID MEASURES

Skin contact:	Wash with soap and plenty of water for several minutes. Immediate medical attention is not required. If symptoms are present, consult a physician.
Eye contact:	Remove contact lenses. Wash eyes with water for at least 15 minutes. Consult a physician.
Ingestion:	Not expected to present a significant ingestion hazard under anticipated conditions of normal use. If you feel unwell, seek medical advice.
Inhalation:	If breathed in, move person into fresh air.
Most important symptoms and effects, both acute and delayed:	No information available.
Notes to physician:	No information available.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media:	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Special hazards arising from the substance or mixture:	No combustion products posing significant hazards are expected from this product (an aqueous solution).
Protective equipment for firefighters:	Wear self-contained breathing apparatus for firefighting if necessary.
Additional information:	No further relevant information available.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Use appropriate protective equipment and methods to clean up spilled substance promptly. Absorb spill onto an appropriate material. Collect and dispose of all waste in accordance with applicable laws. Clean up with soap and water.

SECTION 7. HANDLING AND STORAGE

Safe handling advice: Use good laboratory procedures; avoid eye and skin contact. See section 8 for recommended personal protective equipment.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits Contains no substances with occupational exposure limit values.

Eye/face protection: Use safety glasses or chemical goggles. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection: Handle with gloves. Refer U.S. OSHA 29 CFR 1910.138, European Standard EN374 or appropriate government standards.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Form:	Liquid
Color:	Colorless
Odour:	Odourless
pH:	No data available
Melting point:	No data available
Boiling point:	No data available
Flash point:	No data available
Vapor pressure:	No data available
Specific gravity:	No data available
Solubility:	Soluble in water
Density:	No data available

SECTION 10. STABILITY AND REACTIVITY

This material is stable under normal conditions of use.

Conditions to Avoid: None

Materials to Avoid: None

Hazardous Decomposition Products: None

SECTION 11. TOXICOLOGICAL INFORMATION

Product Information

Acute oral toxicity: No data available

Acute inhalation toxicity: No data available

Acute dermal toxicity: No data available

Component Information

Alkaline Protease

Acute oral toxicity: No data available

Acute inhalation toxicity: No data available

Acute dermal toxicity: No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity: Toxicity to fish: no data available.

Toxicity to daphnia and other aquatic invertebrates:
no data available.

Toxicity to algae: no data available.

Mobility: No data available.

Biodegradation: Aerobic - Exposure time 29 d
Result: 100 % - Readily biodegradable
(OECD Test Guideline 301B)

Bioaccumulation: No data available.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods: Dispose of contents/container in accordance with local regulations.

SECTION 14. TRANSPORT INFORMATION

Not classified as dangerous in the meaning of transport regulations.

SECTION 15. REGULATORY INFORMATION

US Federal Regulations

SARA 311/312: This product is not regulated by SARA.

SARA 302: This product is not regulated by SARA.

SARA 313: This product is not regulated by SARA.

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61): This product does not contains HAPs.

US State Regulations

California Prop 65: This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

WHMIS Hazard Class

D2A Very Toxic Material Causing Other Toxic Effects



SECTION 16. OTHER INFORMATION

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SAFETY DATA SHEET

Revision Date: March 15, 2017

Version 1.0

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: RNaseA

Recommended Use: Laboratory chemicals

Company: Biotium, Inc.
46117 Landing Parkway, Fremont, CA 94538, USA

Information Phone Number: 1-510-265-1027
9-4 pm PST M-F

SECTION 2. HAZARDS IDENTIFICATION

Classification of substance or mixture:

GHS Not classified as hazardous.

Label Elements

GHS Not classified as hazardous.

Carcinogenicity:

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

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

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

NTP No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No.	Concentration
Rnase A	56-81-5	0.1-5%

SECTION 4. FIRST AID MEASURES

Skin contact:	Wash with soap and plenty of water for several minutes. Immediate medical attention is not required. If symptoms are present, consult a physician.
Eye contact:	Remove contact lenses. Wash eyes with water for at least 15 minutes. Consult a physician.
Ingestion:	Not expected to present a significant ingestion hazard under anticipated conditions of normal use. If you feel unwell, seek medical advice.
Inhalation:	If breathed in, move person into fresh air.
Most important symptoms and effects, both acute and delayed:	No information available.
Notes to physician:	No information available.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media:	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Special hazards arising from the substance or mixture:	No combustion products posing significant hazards are expected from this product (an aqueous solution).
Protective equipment for firefighters:	Wear self-contained breathing apparatus for firefighting if necessary.
Additional information:	No further relevant information available.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Use appropriate protective equipment and methods to clean up spilled substance promptly. Absorb spill onto an appropriate material. Collect and dispose of all waste in accordance with applicable laws. Clean up with soap and water.

SECTION 7. HANDLING AND STORAGE

Safe handling advice: Use good laboratory procedures; avoid eye and skin contact. See section 8 for recommended personal protective equipment.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits Contains no substances with occupational exposure limit values.

Eye/face protection: Use safety glasses or chemical goggles. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection: Handle with gloves. Refer U.S. OSHA 29 CFR 1910.138, European Standard EN374 or appropriate government standards.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Form:	Solid
Color:	Colorless
Odour:	Odourless
pH:	No data available
Melting point:	No data available
Boiling point:	No data available
Flash point:	No data available
Vapor pressure:	No data available
Specific gravity:	No data available
Solubility:	Soluble in water
Density:	No data available

SECTION 10. STABILITY AND REACTIVITY

This material is stable under normal conditions of use.

Conditions to Avoid: None

Materials to Avoid: None

Hazardous Decomposition Products: None

SECTION 11. TOXICOLOGICAL INFORMATION

Product Information

Acute oral toxicity:	No data available
Acute inhalation toxicity:	No data available
Acute dermal toxicity:	No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity:	No data available.
Mobility:	No data available.
Biodegradation:	No data available.
Bioaccumulation:	No data available.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods:	Dispose of contents/container in accordance with local regulations.
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SECTION 14. TRANSPORT INFORMATION

Not classified as dangerous in the meaning of transport regulations.

SECTION 15. REGULATORY INFORMATION

US Federal Regulations

SARA 311/312:	This product is not regulated by SARA.
SARA 302:	This product is not regulated by SARA.
SARA 313:	This product is not regulated by SARA.
Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61):	This product does not contains HAPs.

US State Regulations

California Prop 65:

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

WHMIS Hazard Class

Non-controlled.

SECTION 16. OTHER INFORMATION

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SAFETY DATA SHEET

Revision Date: March 15, 2017

Version 1.0

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Wash Buffer

Recommended Use: Laboratory chemicals

Company: Biotium, Inc.
46117 Landing Parkway, Fremont, CA 94538, USA

Information Phone Number: 1-510-265-1027
9-4 pm PST M-F

SECTION 2. HAZARDS IDENTIFICATION

Classification of substance or mixture:

GHS Not classified as hazardous.

Label Elements

GHS Not classified as hazardous.

Carcinogenicity:

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

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

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

NTP No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous ingredients No hazardous ingredients.

SECTION 4. FIRST AID MEASURES

Skin contact: Wash with soap and plenty of water for several minutes. Immediate medical attention is not required. If symptoms are present, consult a physician.

Eye contact: Remove contact lenses. Wash eyes with water for at least 15 minutes. Consult a physician.

Ingestion: Not expected to present a significant ingestion hazard under anticipated conditions of normal use. If you feel unwell, seek medical advice.

Inhalation: If breathed in, move person into fresh air.

Most important symptoms and effects, both acute and delayed: No information available.

Notes to physician: No information available.

SECTION 5. FIREFIGHTING MEASURES

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

Special hazards arising from the substance or mixture: No combustion products posing significant hazards are expected from this product (an aqueous solution).

Protective equipment for firefighters: Wear self-contained breathing apparatus for firefighting if necessary.

Additional information: No further relevant information available.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Use appropriate protective equipment and methods to clean up spilled substance promptly. Absorb spill onto an appropriate material. Collect and dispose of all waste in accordance with applicable laws. Clean up with soap and water.

SECTION 7. HANDLING AND STORAGE

Safe handling advice: Use good laboratory procedures; avoid eye and skin contact. See section 8 for recommended personal protective equipment.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits Contains no substances with occupational exposure limit values.

Eye/face protection: Use safety glasses or chemical goggles. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection: Handle with gloves.
Refer U.S. OSHA 29 CFR 1910.138, European Standard EN374 or appropriate government standards.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Form:	Liquid
Color:	Colorless
Odour:	Odourless
pH:	7-8
Melting point:	No data available
Boiling point:	No data available
Flash point:	No data available
Vapor pressure:	No data available
Specific gravity:	No data available
Solubility:	No data available
Density:	No data available

SECTION 10. STABILITY AND REACTIVITY

This material is stable under normal conditions of use.

Conditions to Avoid: None

Materials to Avoid: None

Hazardous Decomposition Products: None

SECTION 11. TOXICOLOGICAL INFORMATION

Product Information

Acute oral toxicity:	No data available
Acute inhalation toxicity:	No data available
Acute dermal toxicity:	No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity:	No data available.
Mobility:	No data available.
Biodegradation:	No data available.
Bioaccumulation:	No data available.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods:	Dispose of contents/container in accordance with local regulations.
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SECTION 14. TRANSPORT INFORMATION

Not classified as dangerous in the meaning of transport regulations.

SECTION 15. REGULATORY INFORMATION

US Federal Regulations

SARA 311/312:	This product is not regulated by SARA.
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Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61):	This product does not contains HAPs.

US State Regulations

California Prop 65:

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

WHMIS Hazard Class

Non-controlled.

SECTION 16. OTHER INFORMATION

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