

## SAFETY DATA SHEET

Date: July 5, 2023

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Dewaxing Solution  
**Catalog Number:** 99876-30ML  
**Unit Size:** 30 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****Signal word** Danger**Health hazards**

Aspiration hazard (Category 1), H304

**Physical hazards** None**Hazard statements**

H304 – May be fatal if swallowed and enters airways.

**Precautionary statements**

P301 + P310 – IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

P331 – Do NOT induce vomiting.

P405 – Store locked up.

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

**GHS hazard pictogram****WHMIS Classification**

Aspiration hazard (Category 1), H304

**WHMIS hazard pictogram****NFPA Rating**

Health hazard: 0

Fire: 0

Reactivity Hazard: 0

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

Aspiration hazard (Category 1), H304

**Labeling according to Regulation (EC) No 1272/2008[CLP]****Hazard pictogram****Signal word** Danger

**Hazard statements**

H304 – May be fatal if swallowed and enters airways.

**Precautionary statements**

P301 + P310 – IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

P331 – Do NOT induce vomiting.

P405 – Store locked up.

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

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**3. COMPOSITION/INFORMATION ON INGREDIENTS**

| Name       | CAS No.  | EC No.    | Weight % | Classification    |
|------------|----------|-----------|----------|-------------------|
| Hexadecane | 544-76-3 | 208-878-9 | 80-100%* | Asp. Tox. 1; H304 |

\*Exact concentration withheld as trade secret.

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**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.

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**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.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Components with workplace control parameters

Substance: 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.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

|                                       |   |
|---------------------------------------|---|
| Chemical Name                         | Dewaxing Solution   |
| Appearance                            | Liquid  |
| Odor                                  | Odorless  |
| Odor threshold                        | No data available   |
| pH                                    | No data available   |
| Melting point/freezing point          | Melting point/range: 18 °C (64 °F) at 1,013 hPa                       |
| Boiling point                         | 285 °C 545 °F at 1,013 hPa  |
| Flash point                           | 112 °C (234 °F) - Regulation (EC) No. 440/2008, Annex, A.9            |
| Evaporate rate                        | No data available   |
| Flammability                          | No data available   |
| Explosive limits                      | No data available   |
| Vapor pressure                        | 0.004 hPa at 20 °C (68 °F) - Regulation (EC) No. 440/2008, Annex, A.4 |
| Vapor density                         | 7.82 - (Air = 1.0)  |
| Relative density                      | 0.773 g/cm <sup>3</sup> at 15 °C (59 °F)                              |
| Solubility                            | Insoluble   |
| Partition coefficient:n-octanol/water | No data available   |
| Auto-ignition temperature             | No data available   |
| Decomposition temperature             | No data available   |
| Viscosity                             | 4.29 mm <sup>2</sup> /s at 20 °C (68 °F) -                            |
| Explosive properties                  | No data available   |
| Oxidizing properties                  | No data available   |
| Surface tension                       | 24.47 mN/m at 25 °C (77 °F)   |
| Relative vapor density                | 7.82 - (Air = 1.0)  |

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## 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

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**11. TOXICOLOGICAL INFORMATION****Hexadecane****Acute toxicity****Oral LD50** LD50 Oral - Rat - male and female - > 5,000 mg/kg  
(OECD Test Guideline 401)**Inhalation LC50** No data available**Dermal LD50** LD50 Dermal - Rabbit - male and female - > 3,160 mg/kg  
(OECD Test Guideline 402)**Other information on acute toxicity** No data available**Skin corrosion/irritation** Skin - Rabbit  
Result: No skin irritation - 4 h  
(OECD Test Guideline 404)**Serious eye damage/eye irritation** Eyes - Rabbit  
Result: No eye irritation - 24 h  
(OECD Test Guideline 405)**Respiratory or skin sensitization** Maximization Test - Guinea pig  
Result: negative  
(OECD Test Guideline 406)**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: Micronucleus test

Species: Mouse

Cell type: Red blood cells (erythrocytes)

Application Route: Oral

Method: OECD Test Guideline 474

Result: negative

Remarks: (in analogy to similar products)

The value is given in analogy to the following substances: Kerosine

Test Type: Mutagenicity (mammal cell test): chromosome aberration.

Species: Rat

Cell type: Bone marrow

Application Route: Intraperitoneal

Method: OECD Test Guideline 475

Result: negative

Remarks: (in analogy to similar products)

Test Type: dominant lethal test

Species: Mouse

Cell type: sperm

Application Route: Inhalation

Method: OECD Test Guideline 483

Result: negative

Remarks: (in analogy to similar products)

### 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

Repeated dose toxicity - Rat - male and female - Oral - 13 Weeks - NOAEL (No observed adverse effect level) -  $\geq$  5,000 mg/kg

Remarks: (in analogy to similar products)

Repeated dose toxicity - Rat - male and female - Dermal - NOAEL (No observed adverse effect level) -  $>$  495 mg/kg

Remarks: (in analogy to similar products)

RTECS: ML9200000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

After absorption of large quantities: narcosis

Other dangerous properties cannot be excluded.

Handle in accordance with good industrial hygiene and safety practice.

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## 12. ECOLOGICAL INFORMATION

### Toxicity

Toxicity to fish semi-static test LL50 - Fish -  $>$  1,028 mg/l - 96 h  
Remarks: (in analogy to similar products)

Toxicity to daphnia and other aquatic invertebrates Remarks: (in analogy to similar products) (n-hexadecane)

Toxicity to algae EL50 - *Pseudokirchneriella subcapitata* (green algae) -  $>$  3,200 mg/l - 72 h  
Remarks: (in analogy to similar products) (n-hexadecane)

**Persistence and degradability**

Biodegradability aerobic - Exposure time 28 d  
Result: 74 % - Readily biodegradable.  
(OECD Test Guideline 306)

**Bioaccumulative potential**

Bioaccumulation *Salmo salar* (Atlantic salmon) - 7 d  
- 1700 µg/l(n-hexadecane)

Bioconcentration factor (BCF): 5.6

**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

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**13. DISPOSAL CONSIDERATIONS**

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

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**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

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**15. REGULATION INFORMATION****US Federal Regulations**

US Toxic Substances Control Act (TSCA): White mineral oil: listed  
SARA 302: No chemicals were found.  
SARA 313: No chemicals were found.  
SARA 311/312 Hazards: No chemicals were found.

**WHMIS Hazard Class** Aspiration hazard (Category 1), H304

**WHMIS Hazard Pictogram**



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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. 1

Revision date (Initials) 7/5/2023 (ET)

### Reason for revision

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.

## SAFETY DATA SHEET

Date: October 17, 2023

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** DNAstorm™ FFPE CAT5™ Lysis Buffer  
**Catalog Number:** 99869-12ML, 99869-25ML  
**Unit Size:** 12 mL, 25 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

Sodium dodecyl sulfate:  
Combustible dusts  
Acute toxicity - oral - Category 4  
Skin corrosion / irritation - Category 2  
Serious eye damage / eye irritation - Category 2A

#### Hazard statements

H302 – Harmful if swallowed  
H315 – Causes skin irritation  
H319 – Causes serious eye irritation

#### Precautionary statements

P264 - Wash hands thoroughly after handling.  
P270 - Do not eat, drink or smoke when using this product.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
P312 - Call a POISON CENTER or doctor/physician if you feel unwell.  
P330 - Rinse mouth.  
P362 - Take off contaminated clothing and wash before reuse.  
P501 - Dispose of contents/container to approved waste disposal facility.  
P301+P312 - IF SWALLOWED: call a POISON CENTER or doctor/physician IF you feel unwell.  
P302+P352 - IF ON SKIN: wash with plenty of soap and water.  
P332+P313 - IF SKIN irritation occurs: Get medical advice/attention  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P337+P313- IF eye irritation persists: Get medical advice/attention.

#### Hazard pictogram





**NFPA Rating**Sodium dodecyl sulfate  
Health hazard: 0  
Fire: 0  
Reactivity Hazard: 0

## Glycerol:

Health hazard: 1  
Fire: 1  
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

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**3. COMPOSITION/INFORMATION ON INGREDIENTS**

| Name                   | CAS No.  | EC No.    | Weight % | Classification   |
|------------------------|----------|-----------|----------|--|
| Sodium dodecyl sulfate | 151-21-3 | 205-788-1 | 1-5%*    | WHMIS Classification<br>Combustible dusts<br>Acute toxicity - oral - Category 4<br>Skin corrosion / irritation - Category 2<br>Serious eye damage / eye irritation - Category 2A |
| Glycerol               | 56-81-5  | 200-289-5 | 1-5%*    | N/A  |

\*Exact concentration withheld as trade secret.

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**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

Substance: Glycerol

CAS no. 56-81-5

| Country                 | Australia                | Austria | Belgium              | Canada - Ontario     | Canada - Québec      | Finland              | France               |
|-------------------------|--------------------------|---------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Limit value, 8hours     | 10 (1) mg/m <sup>3</sup> |         | 10 mg/m <sup>3</sup> | 10 mg/m <sup>3</sup> | 10 mg/m <sup>3</sup> | 20 mg/m <sup>3</sup> | 10 mg/m <sup>3</sup> |
| Limit value, short term |                          |         |                      |                      |                      |                      |                      |

| Country                 | Germany (AGS)                | Germany (DFG)                | Ireland              | New Zealand              | Poland               | Singapore            | South Korea          |
|-------------------------|------------------------------|------------------------------|----------------------|--------------------------|----------------------|----------------------|----------------------|
| Limit value, 8hours     | 200 (1) mg/m <sup>3</sup>    | 200 (1) mg/m <sup>3</sup>    | 10 mg/m <sup>3</sup> | 10 (1) mg/m <sup>3</sup> | 10 mg/m <sup>3</sup> | 10 mg/m <sup>3</sup> | 10 mg/m <sup>3</sup> |
| Limit value, short term | 400 (1)(2) mg/m <sup>3</sup> | 400 (1)(2) mg/m <sup>3</sup> |                      |                          |                      |                      |                      |

| Country                 | Spain                | Switzerland           | United Kingdom       | USA-OSHA                               |
|-------------------------|----------------------|-----------------------|----------------------|--|
| Limit value, 8hours     | 10 mg/m <sup>3</sup> | 50 inhalable aerosol  | 10 mg/m <sup>3</sup> | 15 inhalable dust<br>5 respirable dust |
| Limit value, short term |                      | 100 inhalable aerosol |                      |  |

Australia (1) This value is for inhalable dust containing no asbestos and < 1% crystalline silica.

Germany (AGS) (1) Inhalable fraction (2) 15 minutes average value.

Germany6 (DFG) (1) Inhalable fraction (2) 15 minutes average value.

New Zealand (1) The value for inhalable dust containing no asbestos and less than 1% free silica.

Poland (1) Inhalable fraction

### 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.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

|                                       |                                   |
|---------------------------------------|-----------------------------------|
| Chemical Name                         | DNASTORM™ FFPE CAT5™ Lysis Buffer |
| Appearance                            | Liquid                            |
| Odor                                  | Odorless                          |
| Odor threshold                        | No data available                 |
| pH                                    | 6.4-7.4                           |
| 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                 |

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## 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

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## 11. TOXICOLOGICAL INFORMATION

**Sodium dodecyl sulfate****Acute toxicity****Oral LD50**

LD50 Oral - Rat - female - 977 mg/kg  
(OECD Test Guideline 401)

Symptoms: Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract.

Acute toxicity estimate Inhalation - 4 h - 1.51 mg/l - dust/mist

**Inhalation LC50** LC50 Inhalation Rat: > 3,900 mg/m<sup>3</sup>/1H  
**Dermal LD50** LD50 Dermal - Rabbit - > 2,000 mg/kg  
(OECD Test Guideline 404)

**Other information on acute toxicity** No data available

### **Skin corrosion/irritation**

Skin - Rabbit

Result: Irritations

(OECD Test Guideline 404)

### **Serious eye damage/eye irritation**

Eyes - Rabbit

Result: Irreversible effects on the eye

(OECD Test Guideline 405)

### **Respiratory or skin sensitization**

Maximization Test

Result: negative

Remarks: (IUCLID)

### **Germ cell mutagenicity**

Test Type: Ames test

Test system: *Salmonella typhimurium*

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: negative

Test Type: Mutagenicity (mammal cell test):

Test system: Mouse lymphoma test

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

### **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

### **Glycerol**

#### **Acute toxicity**

**Oral LD50** LD50 Oral - Rat – 12600 mg/kg  
LD50 Oral – Mice – 4090 mg/kg  
TDlo Oral – Human – 1428 mg/kg

**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**  
RTECS: MA8050000

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## 12. ECOLOGICAL INFORMATION

### Sodium dodecyl sulfate

#### Toxicity

Toxicity to Fish: Flow-through test LC50 - *Pimephales promelas* (fathead minnow) - 29 mg/l - 96 h (OECD Test Guideline 203)

Toxicity to daphnia and other aquatic invertebrates: flow-through test EC50 - *Daphnia dubia* (Water flea) - 5.55 mg/l - 48 h Remarks: (ECHA); flow-through test NOEC - *Ceriodaphnia dubia* (water flea) - 0.88 mg/l - 7 d (US-EPA)

Toxicity to algae: ErC50 - *Desmodesmus subspicatus* (green algae) - > 120 mg/l - 72h (DIN 38412)

Toxicity to bacteria: EC50 - activated sludge - 130 mg/l - 3 h (OECD Test Guideline 209)

**Persistence and degradability** aerobic - Exposure time 28 d  
Result: 95 % - Readily biodegradable.  
(OECD Test Guideline 301B)

**Bioaccumulative potential** Cyprinus carpio (Carp) - 72 h  
(Sodium dodecyl sulphate)  
Bioconcentration factor (BCF): 3.9 - 5.3

**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

### Glycerol

#### Toxicity

Toxicity threshold (cell multiplication inhibition test) Algae (*Microcystis aeruginosa*) 2900 mg/l

Toxicity threshold (cell multiplication inhibition test) Protozoa (*Entosiphon sulcatum*) 3200 mg/l

46117 Landing Parkway, Fremont, CA 94538 U.S.A.  
Tel: 1-510-265-1027; Fax: 1-510-265-1352btinfo@biotium.com  
http://www.biotium.com/

LC50; Species: Goldfish; Concentration: >5000 mg/L for 24 hr - modified ASTM D 1345  
LC50; Species: *Daphnia magna* (Water flea, age < or = 24 hr); Conditions: freshwater, static, 20-22 °C;  
Concentration: >10000 mg/L for 24 hr /formulated product/

**Persistence and degradability** aerobic - Exposure time 2 d  
Result: 90 % - Readily biodegradable.  
Remarks: (ECHA)  
**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

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### 13. DISPOSAL CONSIDERATIONS

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

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### 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** N/A  
**Special precaution for user** None

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### 15. REGULATION INFORMATION

#### US Federal Regulations

US Toxic Substances Control Act (TSCA): Sodium dodecyl sulfate: listed  
Glycerol: listed

SARA 302: No chemicals were found.  
SARA 313: No chemicals were found.  
SARA 311/312 Hazards: No chemicals were found.

#### WHMIS Hazard Class

Sodium dodecyl sulfate:  
Combustible dusts  
Acute toxicity - oral - Category 4  
Skin corrosion / irritation - Category 2  
Serious eye damage / eye irritation - Category 2A

---

### 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. 5

Revision date (Initials) 10/17/23 (JK)

Reason for revision Added Poland (1) Inhalable fraction for glycerol in section 8.

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.

# SAFETY DATA SHEET

Date: October 17, 2023

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** DNAstorm™ FFPE Proteinase K  
**Catalog Number:** 99870  
**Unit Size:** 1.2 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

#### Alkaline protease

Respiratory sensitization : Category 1

Skin sensitization : Category 1

**Signal word** Danger**Health hazards** None**Physical hazards** None

#### Hazard statements

H317 – May cause an allergic reaction

H334 – May cause allergy or asthma symptoms or breathing difficulties if inhaled

#### Precautionary statements

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

P272 - Contaminated work clothing should not be allowed out of the workplace.

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

P285 - In case of inadequate ventilation wear respiratory protection.

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

P363 - Wash contaminated clothing before reuse.

P304+P341 - IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

P333+P313 - IF SKIN irritation or rash occurs: Get medical advice/attention.

P342+P311 - IF experiencing respiratory symptoms: call a POISON CENTER or doctor/physician.

P501 - Dispose of contents/container to approved waste disposal facility.

#### GHS hazard pictogram

**WHMIS classification** None

#### NFPA Rating

##### Alkaline protease

Health hazard: 0

Fire: 0

Reactivity Hazard: 0

##### Glycerol

Health hazard: 1

Fire: 1



Reactivity Hazard: 0

**Classification according to Regulation (EC) No 1272/2008[CLP]** None**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   |
|-------------------|------------|-----------|----------|--|
| Alkaline protease | 39450-01-6 | 254-457-8 | 1-10%*   | GHS Classifications<br>Respiratory sensitization : Category 1<br>Skin sensitization : Category 1 |
| Glycerol          | 56-81-5    | 200-289-5 | 20%      | N/A  |

\*Exact concentration withheld as trade secret.

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### 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 4°C.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Components with workplace control parameters

Substance: Glycerol

CAS no. 56-81-5

| Country                 | Australia                | Austria | Belgium              | Canada - Ontario     | Canada - Québec      | Finland              | France               |
|-------------------------|--------------------------|---------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Limit value, 8hours     | 10 (1) mg/m <sup>3</sup> |         | 10 mg/m <sup>3</sup> | 10 mg/m <sup>3</sup> | 10 mg/m <sup>3</sup> | 20 mg/m <sup>3</sup> | 10 mg/m <sup>3</sup> |
| Limit value, short term |                          |         |                      |                      |                      |                      |                      |

| Country                 | Germany (AGS)                | Germany (DFG)                | Ireland              | New Zealand              | Poland               | Singapore            | South Korea          |
|-------------------------|------------------------------|------------------------------|----------------------|--------------------------|----------------------|----------------------|----------------------|
| Limit value, 8hours     | 200 (1) mg/m <sup>3</sup>    | 200 (1) mg/m <sup>3</sup>    | 10 mg/m <sup>3</sup> | 10 (1) mg/m <sup>3</sup> | 10 mg/m <sup>3</sup> | 10 mg/m <sup>3</sup> | 10 mg/m <sup>3</sup> |
| Limit value, short term | 400 (1)(2) mg/m <sup>3</sup> | 400 (1)(2) mg/m <sup>3</sup> |                      |                          |                      |                      |                      |

| Country                 | Spain                | Switzerland           | United Kingdom       | USA-OSHA                               |
|-------------------------|----------------------|-----------------------|----------------------|--|
| Limit value, 8hours     | 10 mg/m <sup>3</sup> | 50 inhalable aerosol  | 10 mg/m <sup>3</sup> | 15 inhalable dust<br>5 respirable dust |
| Limit value, short term |                      | 100 inhalable aerosol |                      |  |

Australia (1) This value is for inhalable dust containing no asbestos and < 1% crystalline silica.

Germany (AGS) (1) Inhalable fraction (2) 15 minutes average value.

Germany (DFG) (1) Inhalable fraction (2) 15 minutes average value.

New Zealand (1) The value for inhalable dust containing no asbestos and less than 1% free silica.

Poland (1) Inhalable fraction

### 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                | DNASTORM™ FFPE Proteinase K |
| Appearance                   | Liquid                      |
| 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 |
| 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

Glycerol

**Oral LD50** LD50 Oral - Rat – 12600 mg/kg  
LD50 Oral – Mice – 4090 mg/kg  
TDLo Oral – Human – 1428 mg/kg

**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**

Glycerol

RTECS: MA8050000

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**12. ECOLOGICAL INFORMATION****Toxicity**

Glycerol

Toxicity threshold (cell multiplication inhibition test) Algae (*Microcystis aeruginosa*) 2900 mg/lToxicity threshold (cell multiplication inhibition test) Protozoa (*Entosiphon sulcatum*) 3200 mg/l

LC50; Species: Goldfish; Concentration: &gt;5000 mg/L for 24 hr - modified ASTM D 1345

LC50; Species: *Daphnia magna* (Water flea, age < or = 24 hr); Conditions: freshwater, static, 20-22 °C;

Concentration: &gt;10000 mg/L for 24 hr /formulated product/

**Persistence and degradability**

Glycerol

aerobic - Exposure time 2 d

Result: 90 % - Readily biodegradable.

Remarks: (ECHA)

**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

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**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

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**15. REGULATION INFORMATION****US Federal Regulations**

US Toxic Substances Control Act (TSCA): Glycerol: 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

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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. 5

Revision date (Initials) 10/17/23 (JK)

Reason for revision Added Poland (1) Inhalable fraction for glycerol in section 8.

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.

## SAFETY DATA SHEET

Date: April 21, 2022

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** RNase A  
**Catalog Number:** 99871-600UL, 99871-1200UL  
**Unit Size:** 600 uL 1.2 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: 1

Fire: 1

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

| Name     | CAS No. | EC No.    | Weight % | Classification |
|----------|---------|-----------|----------|----------------|
| Glycerol | 56-81-5 | 200-289-5 | 20%      | N/A            |

### 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.

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## 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  | RNase A           |
| Appearance     | Liquid            |
| 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 |
| 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** LD50 Oral - Rat – 12600 mg/kg  
LD50 Oral – Mice – 4090 mg/kg  
TDlo Oral – Human – 1428 mg/kg

**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**

RTECS: MA8050000

---

**12. ECOLOGICAL INFORMATION****Toxicity**Toxicity threshold (cell multiplication inhibition test) Algae (*Microcystis aeruginosa*) 2900 mg/lToxicity threshold (cell multiplication inhibition test) Protozoa (*Entosiphon sulcatum*) 3200 mg/l

LC50; Species: Goldfish; Concentration: &gt;5000 mg/L for 24 hr - modified ASTM D 1345

LC50; Species: *Daphnia magna* (Water flea, age < or = 24 hr); Conditions: freshwater, static, 20-22 °C;

Concentration: &gt;10000 mg/L for 24 hr /formulated product/

**Persistence and degradability** aerobic - Exposure time 2 d  
Result: 90 % - Readily biodegradable.  
Remarks: (ECHA)**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

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**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

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**15. REGULATION INFORMATION****US Federal Regulations**

US Toxic Substances Control Act (TSCA): Glycerol: 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) 4/21/22 (ET)

Reason for revision Addition of glycerol and updates to classification and labeling in section 2 and 3.  
Updates to toxicological and ecological information in sections 11 and 12.  
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.

## SAFETY DATA SHEET

Date: October 13, 2023

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### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** DNA Bead Mix  
**Catalog Number:** 99874  
**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**

**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 ingredients present at concentrations classified as harmful 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.

---

### 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                | DNA Bead Mix      |
| Appearance                   | Brown suspension  |
| Odor                         | No data available |
| 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 |
| Explosive limits             | No data available |

|                                       |                   |
|---------------------------------------|-------------------|
| 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 |

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## 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

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## 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**  
RTECS: None

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**12. ECOLOGICAL INFORMATION**

|   |                          |
|---|--------------------------|
| <b>Toxicity</b>                           | No information available |
| <b>Persistence and degradability</b>      | No information available |
| <b>Bioaccumulative potential</b>          | No information available |
| <b>Mobility in soil</b>                   | No information available |
| <b>Results of PBT and vPvB assessment</b> | No information available |
| <b>Other adverse effects</b>              | No information available |
| <b>Additional information</b>             | No information available |

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**13. DISPOSAL CONSIDERATIONS**

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

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**14. TRANSPORT INFORMATION**

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

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**15. REGULATION INFORMATION****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: 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.      1  
Revision date (Initials)      10/13/2023 (JK)  
Reason for revision

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.