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SAFETY DATA SHEET

Date Revised: December 15, 2016

PRODUCT AND COMPANY IDENTIFICATION

Product Name: 1X Passive Lysis Buffer 2.0

99821-5mL, 99821-15mL, 99821-100mL Catalog Number:

Unit Size: 5 mL (99821-5mL), 15 mL (99821-15mL), 100 mL (99821-100mL)

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

HAZARDS IDENTIFICATION

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

Classification according to Directive 1999/45/EC

None

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

Hazard pictogram

None

Signal word

None

Hazard statements

None

Precautionary statements

None

HMIS Classification (Glycerol)

Health hazard: 0 Flammability: 1 Physical hazards: 0 NFPA Rating (Glycerol)

Health hazard: 0

Fire: 1

Reactivity Hazard: 0

COMPOSITION/INFORMATION ON INGREDIENTS

Name	CAS No.	EC No.	Index No.	Weight %	Classification according to 67/548/EEC	Classification according to regulation (EC)No1278/2008
Glycerol	56-81-5	200-289-5	N/A	10%	N/A	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

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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 -20°C.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Substance Glycerol

CAS no. 56-81-5

country	Austria	Belgium	Denmark	European Union	France	Germany
Limit value,8hours		10 mg/m ³			10 mg/m ³	50 mg/m ³ inhalable aerosol
Limit value, short term						100 mg/m ³ inhalable aerosol

country	Hungary	Italy	Poland	Spain	Sweden	Netherlands	Switzerland
Limit value.8hours			10 mg/m ³	10 mg/m ³			50 mg/m ³
value, or lours							inhalable
							aerosol



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Limit value,	 	 	 	100 mg/m ³
short term				inhalable
				aerosol

country	United Kingdom	USA- NIOSH	USA- OSHA	Australia	Canada	Japan	South Korea
Limit value,8hours	10 mg/m ³		15 mg/m ³ inhalable dust 5 mg/m ³ respirable dust	10 mg/m ³ (1)	10 mg/m ³		10 mg/m ³
Limit value, short term				-			

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

Germany STV 15 minutes average value

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	1X Passive Lysis Buffer 2.0
Appearance	Clear liquid
Odor	No data available
Odor threshold	No data available
pH	7.8
Melting point/freezing point	No data available
Boiling point	No data available
Flash point	No data available
Evaporate rate	No data available
Flammability	No data available
Explosive limits	No data available
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

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Oral LD50 LD50 Oral – Rat - 12,600 mg/kg (Glycerol)

Inhalation LC50 None

Dermal LD50 LD50 Dermal – Rabbit - > 10,000 mg/kg (Glycerol)

Other information on acute toxicity no data available

Skin corrosion/irritation Skin – Rabbit Result: Mild skin irritation - 24 h (Glycerol)

Serious eye damage/eye irritation Eyes - Rabbit Result: Mild eye irritation - 24 h (Glycerol)

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.

Eves May cause eve irritation.

Additional Information

RTECS: MA8050000 (Glycerol)

Prolonged or repeated exposure may cause:, Nausea, Headache, Vomiting, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Kidney – Irregularities - Based on Human Evidence (Glycerol)

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12. ECOLOGICAL INFORMATION

Toxicity no information available

Persistence and degradability no information available

Biodegradation no information available Mobility in soil no information available

Results of PBT and vPvB assessment no information available

Other adverse effects no information available Additional information no information available

13. DISPOSAL CONSIDERATIONS

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

14. TRANSPORT INFORMATION

IATA, IMDG, DOT (US) not dangerous good during transportation

UN number none

UN proper shipping name none Transport hazard class none

Packing group

Environmental hazards none Special precaution for user none

15. REGULATION INFORTMATION

US Federal Regulations

US Toxic Substances Control Act (TSCA): Not listed

SARA 302: No chemicals were found. SARA 313: No chemicals were found.

SARA 311/312 Hazards: No chemicals were found.

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. 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.

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SAFETY DATA SHEET

Date Revised: May 11, 2016

PRODUCT AND COMPANY IDENTIFICATION

Product Name: Firefly Luciferase Assay Buffer 2.0 Catalog Number: 99815-5mL, 99815-15mL, 99815-100mL

Unit Size: 5 mL, 15 mL, 100 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

HAZARDS IDENTIFICATION

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

Classification according to Directive 1999/45/EC

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

Hazard pictogram None Signal word None Hazard statements None Precautionary statements None

HMIS Classification

Health hazard: 0 Flammability: 0 Physical hazards: 0 **NFPA Rating** Health hazard: 0

Fire: 0

Reactivity Hazard: 0

COMPOSITION/INFORMATION ON INGREDIENTS

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

4. FIRST- AID MEASURES

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

FIREFIGHTING MEASURES

Suitable extinguishing media

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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 -80 °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	Firefly Luciferase
	Assay Buffer 2.0
Appearance	Clear liquid
Odor	No data available
Odor threshold	No data available
pH	7.8
Melting point/freezing point	No data available



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Boiling point	No data available
Flash point	No data available
Evaporate rate	No data available
Flammability	No data available
Explosive limits	No data available
Vapor pressure	No data available
Vapor density	No data available
Relative density	No data available
Solubility	Water soluble
Partition coefficient:n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

10. STABILITY AND REACTIVITY

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

No data available

Conditions to avoid

Heat, flames and sparks.

Materials to avoid

No data available

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides

Other decomposition products - no data available

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Oral LD50 None

Inhalation LC50 None

Dermal LD50 None

Other information on acute toxicity no data available

Skin corrosion/irritation no data available

Serious eye damage/eye irritationno 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)



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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

12. ECOLOGICAL INFORMATION

Toxicity no information available

Persistence and degradability no information available

Biodegradation no information available

Mobility in soil no information available

Results of PBT and vPvB assessment no information available

Other adverse effects no information available
Additional information no information available

13. DISPOSAL CONSIDERATIONS

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

14. TRANSPORT INFORMATION

IATA, IMDG, DOT (US) not dangerous good during transportation

UN number none

UN proper shipping name none Transport hazard class none

Packing group none

Environmental hazards none Special precaution for user none

15. REGULATION INFORTMATION

US Federal Regulations

US Toxic Substances Control Act (TSCA): Not listed

SARA 302: No chemicals were found. SARA 313: No chemicals were found.

SARA 311/312 Hazards: No chemicals were found.

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

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Supplier of fluorescent and related biochemical reagents for life science research and drug discovery Glowing Products for Science TM

Biotium

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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.

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SAFETY DATA SHEET

Date Revised: September 4, 2013

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: D-Luciferin, potassium salt
Catalog Number: 10101,10101-1,10101-2
Unit Size: 10mg, 50mg, 1g
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

2. HAZARDS IDENTIFICATION

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

None

Classification according to Directive 1999/45/EC

None

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

Hazard pictogram None Signal word None Hazard statements None

Precautionary statements None

HMIS Classification

Health hazard: 0 Flammability: 0 Physical hazards: 0 **NFPA Rating** Health hazard: 0

Fire: 0

Reactivity Hazard: 0

3. COMPOSITION/INFORMATION ON INGREDIENTS

Name	CAS No.	EC No.	Index No.	Weight %	Classification according to 67/548/EEC	Classification according to regulation (EC)No1278/2008
D-Luciferin, Potassium salt	15144-35-9	-	1	>99%	•	-

4. FIRST- AID MEASURES

General advice



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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 -20 °C.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

None



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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	D-Luciferin, potassium
	salt
Appearance	Solid
Odor	No information available
Odor threshold	No information available
pH	No information available
Melting point/freezing point	Melting point 201°C
Boiling point	No information available
Flash point	No information available
Evaporate rate	No information available
Flammability	No information available
Explosive limits	No information available
Vapor pressure	No information available
Vapor density	No information available
Relative density	No information available
Solubility	Water soluble
Partition coefficient:n-octanol/water	No information available
Auto-ignition temperature	No information available
Decomposition temperature	No information available
Viscosity	No information available
Explosive properties	No information available
Oxidizing properties	No information 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



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No data available

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides

Other decomposition products - no data available

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Oral LD50 None

Inhalation LC50 None

Dermal LD50 None

Other information on acute toxicity no data available

Skin corrosion/irritation no data available

Serious eye damage/eye irritationno 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

12. ECOLOGICAL INFORMATION

Toxicity no information available

Persistence and degradability no information available

Biodegradation no information available

Mobility in soil no information available

Results of PBT and vPvB assessment no information available

Other adverse effects no information available



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Additional information no information available

13. DISPOSAL CONSIDERATIONS

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

14. TRANSPORT INFORMATION

IATA, IMDG, DOT(US) not dangerous good during transportation

UN number none

UN proper shipping name none Transport hazard class none

Packing group none

Environmental hazards none Special precaution for user none

15. REGULATION INFORTMATION

US Federal Regulations

Us Toxic Substances Control Act(TSCA): Not listed

SARA 302: No chemicals were found. SARA 313: No chemicals were found.

SARA 311/312 Hazards: No chemicals were found.

16. OTHER INFORMATION

Classification according to Regulation (EC) Nr. 1272/2008

Prepared by: Regulatory Department

Biotium Inc.

Version no. 2

Reason for revision Application of CLP labeling and corresponding requirements

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

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SAFETY DATA SHEET

Date Revised: May 11, 2016

PRODUCT AND COMPANY IDENTIFICATION

Product Name: Renilla Luciferase Assay Buffer 2.0
Catalog Number: 99816-5mL, 99816-15mL, 99816-100mL

Unit Size: 5 mL, 15 mL, 100 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

2. HAZARDS IDENTIFICATION

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

None

Classification according to Directive 1999/45/EC

None

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

Hazard pictogram None Signal word None Hazard statements None Precautionary statements None

HMIS Classification

Health hazard: 0 Flammability: 0 Physical hazards: 0 **NFPA Rating** Health hazard: 0

Fire: 0

Reactivity Hazard: 0

3. COMPOSITION/INFORMATION ON INGREDIENTS

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

4. FIRST- AID MEASURES

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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5. FIREFIGHTING MEASURES

Suitable extinguishing media

carbon dioxide, dry chemical extinguishers, foam extinguishers or water.

Special protective equipment for firefighters

Wear self contained breathing apparatus for firefighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Avoid breathing vapors, mist or gas. Remove all sources of ignition.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and materials for containment and cleaning up

Contain spillage. Soak up spilled substance with inert absorbent material. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid inhalation of vapor or mist.

Avoid direct contact with substance.

Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place.

Store at -80 °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.

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PHYSICAL AND CHEMICAL PROPERTIES

Chemical Name	Renilla Luciferase
	Assay Buffer 2.0
Appearance	Liquid
Odor	No data available
Odor threshold	No data available
pH	5.5
Melting point/freezing point	No data available
Boiling point	No data available
Flash point	No data available
Evaporate rate	No data available
Flammability	No data available
Explosive limits	No data available
Vapor pressure	No data available
Vapor density	No data available
Relative density	No data available
Solubility	Water soluble
Partition coefficient:n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

10. STABILITY AND REACTIVITY

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

No data available

Conditions to avoid

Heat, flames and sparks.

Materials to avoid

No data available

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides

Other decomposition products - no data available

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Oral LD50 None

Inhalation LC50 None

Dermal LD50 None

Other information on acute toxicity no data available

Skin corrosion/irritation no data available

Serious eye damage/eye irritationno 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.



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

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

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

Reproductive toxicity no data available

Specific target organ toxicity - single exposure (Globally Harmonized System)

no data available

Specific target organ toxicity - repeated exposure (Globally Harmonized System)

no data available

Aspiration hazard

no data available

Potential health effects

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.

Ingestion May be harmful if swallowed.

Skin May be harmful if absorbed through skin. May cause skin irritation.

Eyes May cause eye irritation.

Additional Information

RTECS: None

12. ECOLOGICAL INFORMATION

Toxicity no information available

Persistence and degradability no information available

Biodegradation no information available Mobility in soil no information available

Results of PBT and vPvB assessment no information available

Other adverse effects no information available Additional information no information available

13. DISPOSAL CONSIDERATIONS

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

14. TRANSPORT INFORMATION

IATA, IMDG, DOT (US) not dangerous good during transportation

UN number none

UN proper shipping name none Transport hazard class none

Packing group none

Environmental hazards none Special precaution for user none

15. REGULATION INFORTMATION

US Federal Regulations

US Toxic Substances Control Act (TSCA): Not listed

SARA 302: No chemicals were found. SARA 313: No chemicals were found.

SDS Page **19** of **25** Supplier of fluorescent and related biochemical reagents for life science research and drug discovery Glowing Products for Science TM



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SARA 311/312 Hazards: No chemicals were found.

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. 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.

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SAFETY DATA SHEET

Date Revised: May 11, 2016

PRODUCT AND COMPANY IDENTIFICATION

Product Name: Aquaphile Coelenterazine **Catalog Number:** 10126-200ug, 10126-4mg

Unit Size: 200 ug, 4 mg 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

HAZARDS IDENTIFICATION

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

Classification according to Directive 1999/45/EC

None

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

Hazard pictogram Signal word None **Hazard statements**

None

Precautionary statements None

HMIS Classification

Health hazard: 0 Flammability: 0 Physical hazards: 0 **NFPA Rating** Health hazard: 0

Fire: 0

Reactivity Hazard: 0

COMPOSITION/INFORMATION ON INGREDIENTS

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

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.



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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 -20°. Protect from light.

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



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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	Aquaphile Coelenterazine
Appearance	Yellow solid
Odor	No information available
Odor threshold	No information available
рН	No information available
Melting point/freezing point	No information available
Boiling point	No information available
Flash point	No information available
Evaporate rate	No information available
Flammability	No information available
Explosive limits	No information available
Vapor pressure	No information available
Vapor density	No information available
Relative density	No information available
Solubility	Water soluble
Partition coefficient:n-octanol/water	No information available
Auto-ignition temperature	No information available
Decomposition temperature	No information available
Viscosity	No information available
Explosive properties	No information available
Oxidising properties	No information 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. Light

Materials to avoid

Avoid DMSO; Strong oxidizing agents.

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides

Other decomposition products - no data available

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Oral LD50 None

Inhalation LC50 None

Dermal LD50 None

Other information on acute toxicity no data available



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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

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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

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Ingestion May be harmful if swallowed.

Skin May be harmful if absorbed through skin. May cause skin irritation.

Eyes May cause eye irritation.

Additional Information

RTECS: None

12. ECOLOGICAL INFORMATION

Toxicity no information available

Persistence and degradability no information available

Biodegradation 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 None

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) not dangerous good during transportation

UN number none

UN proper shipping name none Transport hazard class none

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Packing group none
Environmental hazards none
Special precaution for user none

15. REGULATION INFORTMATION

US Federal Regulations

US Toxic Substances Control Act(TSCA): Not listed

SARA 302: No chemicals were found. SARA 313: No chemicals were found.

SARA 311/312 Hazards: No chemicals were found.

16. OTHER INFORMATION

Classification according to Regulation (EC) Nr. 1272/2008

Prepared by: Regulatory Department

Biotium Inc.

Version no. 1
Reason for revision

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