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

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

SAFETY DATA SHEET

Date Revised: October 22, 2018

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name:	RNA Broad Range Buffer
Catalog Number:	99849, 99849-T
Unit Size:	250 mL, 50 mL
Manufacturer/Supplier:	Biotium, Inc.
	46117 Landing Parkway, Fremont, CA 94538, USA Phone: 1-510-265-1027, Fax: 1-510-265-1352 Web: <u>http://www.biotium.com</u>

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

 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.

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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 none CAS no. none 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.



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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	RNA Broad Range Buffer
Appearance	Pale blue liquid
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
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** No data available. **Materials to avoid** No data available **Hazardous decomposition products** No data available 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

12. ECOLOGICAL INFORMATION

Toxicityno information availablePersistence and degradabilityno information availableBiodegradationno information availableMobility in soilno information availableResults of PBT and vPvB assessmentno information availableOther adverse effectsno information availableAdditional informationno 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) not dangerous 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. 1

Reason for revision

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

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SAFETY DATA SHEET

Date Revised: October 22, 2018

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name:	RNA Broad Range Dye, 200X		
Catalog Number:	99848/99848-T		
Unit Size:	1 mL/200 uL		
Manufacturer/Supplier:	Biotium, Inc.		
	46117 Landing Parkway, Fremont, CA 94538, USA		
	Phone: 1-510-265-1027, Fax: 1-510-265-1352		
	Web: <u>http://www.biotium.com</u>		

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: 2 Physical hazards: 0 NFPA Rating Health hazard: 0 Fire: 2 Reactivity Hazard: 0

3. COMPOSITION/INFORMATION ON INGREDIENTS

Name	CAS No.	EC No.	Index No.	Weight %	Classification according to regulation (EC)No1278/2008
DMSO	67-68-5	200-664-3		>99%	NA

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

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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 $4 \,^{\circ}$ C.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Substance Dimethylsulfoxide

CAS no. 67-68-5

country	Austria	Belgium	Denmark	European Union	France	Germany
Limit value,8hours	160mg/m3	-	160mg/m3	-	-	160mg/m3
Limit value, short term	-	-	320mg/m3	-	-	320mg/m3

country	Hungary	Italy	Poland	Spain	Sweden	Netherland s	United Kingdom
Limit value,8hours	-	-	-	-	160mg/m3	-	-
Limit value, short term	-	-	-	-	500mg/m3	-	-

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country	United Kingdom	USA- NIOSH	USA- OSHA	Australia	Canada	Japan	South Korea
Limit value,8hours	-	-	-	-	-	-	-
Limit value, short term	-	-	-	-	-	-	-

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.

Chemical Name	RNA Broad Range Dye, 200X
Appearance	Blue liquid
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
Oxidizing properties	No information available

9. PHYSICAL AND CHEMICAL PROPERTIES

10. STABILITY AND REACTIVITY

Chemical stability

Stable under recommended storage conditions. Possibility of hazardous reactions No data available Conditions to avoid

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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 DMSO Oral LD50 rat - 14,500 mg/kg Inhalation LC50 Inhalation - rat - 4 h - 40250 ppm Dermal LD50 rabbit - > 5,000 mg/kg 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 Salmonella typhimurium assay (Ames test): negative (+/- activation), DMSO is used as a neutral solvent in the Ames mutagen test

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 Not considered to be directly embryotoxic and has been shown to be a successful cryoprotectant for mammalian semen and embryos

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: PV6210000 (DMSO)

12. ECOLOGICAL INFORMATION



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Toxicity DMSOThe LC50(96hrs) for ten species of fish range from 32500 to 43000ppmPersistence and degradabilityno information availableBiodegradationno information availableMobility in soilno information availableResults of PBT and vPvB assessmentno information availableOther adverse effectsno information availableAdditional informationno 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. 1 Reason for revision



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SAFETY DATA SHEET

Date Revised: October 22, 2018

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name:RNA Broad Range Standard, 100 ng/uLCatalog Number:99850Unit Size:300 uLManufacturer/Supplier:Biotium, Inc.46117 Landing Parkway, Fremont, CA 94538, USAPhone: 1-510-265-1027, Fax: 1-510-265-1352Web: 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

 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.

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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 none CAS no. none 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.



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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	RNA Broad Range
	Standard, 100 ng/uL
Appearance	Clear liquid
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
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 No data available. Materials to avoid No data available Hazardous decomposition products No data available 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**

12. ECOLOGICAL INFORMATION

Toxicityno information availablePersistence and degradabilityno information availableBiodegradationno information availableMobility in soilno information availableResults of PBT and vPvB assessmentno information availableOther adverse effectsno information availableAdditional informationno 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) not dangerous 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. 1

Reason for revision

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

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SAFETY DATA SHEET

Date Revised: October 22, 2018

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name:RNA Dilution BufferCatalog Number:99851, 99851-TUnit Size:5 mL, 1 mLManufacturer/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

 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.

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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 none CAS no. none 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.



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

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	RNA Dilution Buffer
Appearance	Clear liquid
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
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** No data available. **Materials to avoid** No data available **Hazardous decomposition products** No data available 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**

12. ECOLOGICAL INFORMATION

Toxicityno information availablePersistence and degradabilityno information availableBiodegradationno information availableMobility in soilno information availableResults of PBT and vPvB assessmentno information availableOther adverse effectsno information availableAdditional informationno 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) not dangerous 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

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Reason for revision