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: April 2, 2020

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Griess Reagent
Catalog Number: 30100A
Unit Size: 50 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
Phosphoric acid
Corrosive to metals (Category 1), H290
Skin corrosion (Category 1B), H314
Serious eye damage (Category 1), H318
Signal word Danger
Health hazards None
Physical hazards None
Hazard statements
H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
Precautionary statements
P234 Keep only in original container.
P264 Wash skin thoroughly after handling.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all Contaminated clothing. Rinse skin with water/ shower.
P304 + P340 + P310 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician.
P305 + P351 + P338 + P310
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
P363 Wash contaminated clothing before reuse.
P390 Absorb spillage to prevent material damage.
P405 Store locked up.
P406 Store in corrosive resistant stainless steel container with a resistant inner liner.
P501 Dispose of contents/ container to an approved waste disposal plant

Sulfanilic acid
Skin irritation (Category 2), H315
Eye irritation (Category 2A), H319
Skin sensitisation (Category 1), H317
Short-term (acute) aquatic hazard (Category 3), H402
Signal word Warning
Health hazards None
Physical hazards None
Hazard statements

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/

H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H402 Harmful to aquatic life.
Precautionary statements
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P264 Wash skin thoroughly after handling.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear eye protection/ face protection.
P280 Wear protective gloves.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P337 + P313 If eye irritation persists: Get medical advice/ attention.
P362 Take off contaminated clothing and wash before reuse.
P501 Dispose of contents/ container to an approved waste disposal plant.

WHMIS classification
Phosphoric acid:
Skin corrosion/irritation (Category 1)
Serious eye damage/eye irritation (Category 1)
Signal word: Danger
Hazard statements
Causes severe skin burns and eye damage (H314)

Sulfanilic acid:
Serious eye damage/eye irritation (Category 2A)
Skin sensitization (Category 1A)
Signal word: Warning
Hazard statements
Causes serious eye irritation (H319)
May cause allergic skin reaction (H317)

GHS hazard pictogram
Phosphoric acid

Sulfanilic acid

HMIS Classification
Health hazard: 3
Flammability: 0
Physical hazards: 0
NFPA Rating
Health hazard: 3
Fire: 0
Reactivity Hazard: 0

Classification according to Regution (EC) No 1272/2008[CLP]
Phosphoric acid:
Skin Corr. 1B

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/

Sulfanilic acid:
Skin irrit. 2
Eye irrit. 2
Skin sens. 1
Classification according to Directive 1999/45/EC None

Labeling according to Regulation (EC) No 1272/2008[CLP]
Phosphoric acid:
Hazard pictogram

Signal word Danger
Hazard statements
H314 Causes severe skin burns and eye damage
Precautionary statements None

Sulfanilic acid:
Hazard pictogram

Signal word Warning
Hazard statements
H315 Causes skin irritation
H319 Causes serious eye irritation
Hr17 May cause an allergic skin reaction
Precautionary statements None

3. COMPOSITION/INFORMATION ON INGREDIENTS

Name	CAS No.	EC No.	Index No.	Weight **%**	Classification according to regulation (EC)No1278/2008
Phosphoric acid	7664-38-2	231-633-2	015-011-00-6	1-3%	Skin Corr. 1B
Sulfanilic acid	121-57-3	204-482-5	614-014-00-X	0.5%	Skin irrit. 2 Eye irrit. 2 Skin sens. 1

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

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/

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 Phosphoric acid
CAS no. 7664-38-2

TLV: 1 mg/m^3 as TWA, 3 mg/m^3 as STEL; (ACGIH 2004).
MAK: (Inhalable fraction) 2 mg/m^3;
Peak limitation category: I(2); Pregnancy risk group: C;
(DFG 2005).
1 mg/m^3 (8h), 2 mg/m^3 (short term) EC OELs
OSHA PEL: TWA 1 mg/m^3
NIOSH REL: TWA 1 mg/m^3 ST 3 mg/m^3
NIOSH IDLH: 1000 mg/m^3

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

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/

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	Griess Reagent
Appearance	Liquid
Odor	No information available
Odor threshold	No information available
pH	<7
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	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

No data available

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NOx), Sulphur oxides

Other decomposition products - no data available

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Oral LD50 Rat - 1,250 mg/kg (Phosphoric acid)
Remarks: Lungs, Thorax, or Respiration: Acute pulmonary edema. Liver: Changes in liver weight. (RTECS) (Phosphoric acid)

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/

	Rat - 12,300 mg/kg (Sulfanilic acid)
Inhalation LC50	None
Dermal LD50	Rat - male and female - > 2,000 mg/kg (Sulfanilic acid) (OECD Test Guideline 402)
LD50 Intravenous	Rat - 6,000 mg/kg (Sulfanilic acid)

Other information on acute toxicity no data available

Skin corrosion/irritation

Phosphoric acid Skin – Rabbit
Result: Causes burns. - 24 h
Remarks: (ECHA) (Regulation (EC) No 1272/2008, Annex VI)

Serious eye damage/eye irritation

Causes serious eye damage (Phosphoric acid)

Eyes – Rabbit (Sulfanilic acid)
Result: Irritating to eyes. (OECD Test Guideline 405)

Respiratory or skin sensitization no data available

Germ cell mutagenicity

Phosphoric acid- Ames test
Escherichia coli/Salmonella typhimurium
Result: negative
Mutagenicity (mammal cell test): chromosome aberration.
Human lymphocytes
Result: negative
In vitro mammalian cell gene mutation test mouse lymphoma cells
Result: negative

Sulfanilic acid- Hamster fibroblast
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

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/

Phosphoric acid-	Repeated dose toxicity - Rat - male and female - Oral - 90 Days - Lowest observed adverse effect level - 155 mg/kg (ECHA) RTECS: TB6300000 burning sensation, cough, wheezing, laryngitis, shortness of breath, headache, nausea, vomiting, may cause cyanosis. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Stomach - Irregularities - Based on Human Evidence Stomach - Irregularities - Based on Human Evidence
Sulfanilic acid-	Repeated dose toxicity - Rat - male and female - Oral - No observed adverse effect level - 1,000 mg/kg RTECS: WP3895500 irritant effects To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

12. ECOLOGICAL INFORMATION

Toxicity

Phosphoric acid-	Toxicity to daphnia and other aquatic invertebrates Static test EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48 h (OECD Test Guideline 202) Toxicity to algae Static test ErC50 - Desmodesmus subspicatus (green algae) - > 100 mg/l - 72 h (OECD Test Guideline 201) Toxicity to bacteria static test EC50 - activated sludge - > 1,000 mg/l - 3 h (OECD Test Guideline 209)
Sulfanic acid-	Toxicity to fish Static test LC50 - Danio rerio (zebra fish) - > 100 mg/l - 96 h (OECD Test Guideline 203) Toxicity to daphnia and other aquatic invertebrates Static test EC50 - Daphnia magna (Water flea) - 23 mg/l - 48 h (OECD Test Guideline 202) Toxicity to algae Static test EC50 - Desmodesmus subspicatus (green algae) - 97 mg/l - 72 h (OECD Test Guideline 201)

Persistence and degradability

Phosphoric acid-	The methods for determining the biological degradability are not applicable to inorganic substances.

Biodegradation

Sulfanic acid- aerobic -	Exposure time 72 h Result: 100 % - Readily biodegradable.

Mobility in soil no information available

Results of PBT and vPvB assessment no information available

Other adverse effects no information available

Additional information

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/

Phosphoric acid- May be harmful to aquatic organisms due to the shift of the pH.
Sulfanic acid- Harmful to aquatic life

13. DISPOSAL CONSIDERATIONS

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

14. TRANSPORT INFORMATION

Phosphoric acid- **IATA, IMDG, DOT (US), TDG**
UN number 3453
UN proper shipping name Phosphoric acid, solid
Transport hazard class 8
Packing group III
Environmental hazards None
Transport in bulk according to Annex II of MARPOL 73/78 and IBC Code
None
Special precaution for user None

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

15. REGULATION INFORTMATION

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

Massachusetts Right To Know Components

	CAS-No.	Revision Date
Phosphoric acid	7664-38-2	1993-02-16

Pennsylvania Right To Know Components

	CAS-No.	Revision Date
Sulfanilic acid	121-57-3	
Phosphoric acid	7664-38-2	1993-02-16

New Jersey Right To Know Components

	CAS-No.	
Sulfanilic acid	121-57-3	
Phosphoric acid	7664-38-2	1993-02-16

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

WHMIS Hazard Class
Phosphoric acid:
Skin corrosion/irritation (Category 1)

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/

Serious eye damage/eye irritation (Category 1)

Sulfanilic acid:
Serious eye damage/eye irritation (Category 2A)
Skin sensitization (Category 1A)

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)	4/2/2020 ET
Reason for revision	Application of WHMIS labeling 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.

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

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

SAFETY DATA SHEET

Date: April 2, 2020

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Nitrite Standard Solution
Catalog Number: 30100B
Unit Size: 1 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
Oxidizing solids (Category 3), H272
Acute toxicity, Oral (Category 3), H301
Eye irritation (Category 2A), H319
Carcinogenicity (Category 1B), H350
Short-term (acute) aquatic hazard (Category 1), H400

Signal word Danger
Health hazards None
Physical hazards None
Hazard statements
H272 May intensify fire; oxidizer.
H301 Toxic if swallowed.
H319 Causes serious eye irritation.
H350 May cause cancer.
H400 Very toxic to aquatic life.
Precautionary statements
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood. P210 Keep away from heat.
P220 Keep/Store away from clothing/ combustible materials.
P221 Take any precaution to avoid mixing with combustibles.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P273 Avoid release to the environment.
P280 Wear protective gloves/ eye protection/ face protection.
P281 Use personal protective equipment as required.
P301 + P310 + P330 IF SWALLOWED: Immediately call a POISON CENTER/doctor. Rinse mouth.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P337 + P313 If eye irritation persists: Get medical advice/ attention.
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
P391 Collect spillage.
P405 Store locked up.
P501 Dispose of contents/ container to an approved waste disposal plant.
WHMIS classification
Oxidizing solids (Category 3)
Serious eye damage/eye irritation (Category 2)

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/

GHS hazard pictogram

HMIS Classification
Health hazard: 3
Flammability: 0
Physical hazards: 2
NFPA Rating
Health hazard: 3
Fire: 0
Reactivity Hazard: 2

Classification according to Regulation (EC) No 1272/2008[CLP]
Ox. Sol. (Category 3), H272
Acute Tox. (Category 3), H301
Aquatic Acute (Category 1), H400

Classification according to Directive 1999/45/EC None

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

Signal word Danger
Hazard statements
H272 May intensify fire; oxidizer.
H301 Toxic if swallowed.
H400 Very toxic to aquatic life.
Precautionary statements None

3. COMPOSITION/INFORMATION ON INGREDIENTS

Name	CAS No.	EC No.	Index No.	Weight **%**	Classification according to regulation (EC)No1278/2008
Sodium nitrite	7632-00-0	231-555-9	007-010-00-4	<1%	Ox. Sol. 3 Acute Tox. 3 Eye Irrit. 2A Carc. 1B Aquatic Acute 1 H272, H301, H319, H350, H400 M-Factor - Aquatic Acute: 1

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

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/

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

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture

Nitrogen oxides (NOx), Sodium oxides

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. Discharge into the environment must be avoided.

Methods and materials for containment and cleaning up

Sweep up and shovel. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition - No smoking. Keep away from heat and sources of ignition.

Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place.
Store at 4 ºC.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

No data available

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.

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/

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	Nitrite Standard Solution
Appearance	Liquid
Odor	No information available
Odor threshold	No information available
pH	~7
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	No information available
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
Acids, Powdered metals, Ammonia, Cyanides, Amines, Activated carbon, Combustible material, Reducing agents
Hazardous decomposition products
Hazardous decomposition products formed under fire conditions. – Nitrogen oxides (NOx), Sodium oxides
Other decomposition products - no data available

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Oral LD50	Rat - 157.9 mg/kg
Inhalation LC50	Rat - 4 h - 5.5 mg/l

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/

Remarks: (RTECS)

Dermal LD50 None

Other information on acute toxicity no data available

Skin corrosion/irritation no data available

Serious eye damage/eye irritation Eyes - Rabbit
Result: Moderate eye irritation
(OECD Test Guideline 405)

Respiratory or skin sensitization no data available

Germ cell mutagenicity no data available

Carcinogenicity

IARC: 2A - Group 2A: Probably carcinogenic to humans (Sodium nitrite)

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: RA1225000

Headache, Nausea, Incoordination., Absorption into the body leads to the formation of methemoglobin which in sufficient concentration causes cyanosis. Onset may be delayed 2 to 4 hours or longer.

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

Liver - Irregularities - Based on Human Evidence

Liver - Irregularities - Based on Human Evidence

12. ECOLOGICAL INFORMATION

Toxicity

Toxicity to daphnia and other aquatic invertebrates
Static test - Daphnia magna (Water flea) - 15.4 mg/l - 48 h
(OECD Test Guideline 202)

Toxicity to algae NOEC - Desmodesmus subspicatus (green algae) - 100 mg/l - 72 h
(OECD Test Guideline 201)

Toxicity to bacteria static test EC50 - activated sludge - 510 mg/l - 3 h
(OECD Test Guideline 209)

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/

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 Very toxic to aquatic life

13. DISPOSAL CONSIDERATIONS

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

14. TRANSPORT INFORMATION

IATA, IMDG, DOT (US), TDG
UN number 1500
UN proper shipping name Sodium Nitrite
Transport hazard class 5.1 (6.1)
Packing group III
Environmental hazards Marine pollutant
Transport in bulk according to Annex II of MARPOL 73/78 and IBC Code None
Special precaution for user None

15. REGULATION INFORTMATION

US Federal Regulations
US Toxic Substances Control Act (TSCA): Not listed
SARA 302: No chemicals were found.
SARA 313: No chemicals were found.
The following components are subject to reporting levels established by SARA Title III, Section 313:

	CAS-No.	Revision Date
Sodium nitrite	7632-00-0	2007-07-01

Massachusetts Right To Know Components	CAS-No.	Revision Date
Sodium nitrite	7632-00-0	2007-07-01

Pennsylvania Right To Know Components	CAS-No.	Revision Date
Sodium nitrite	7632-00-0	2007-07-01

New Jersey Right To Know Components	CAS-No.	Revision Date
Sodium nitrite	7632-00-0	2007-07-01

California Prop. 65 Components
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.
SARA 311/312 Hazards: Chronic Health Hazard

WHMIS Hazard Class
Oxidizing solids (Category 3)
Serious eye damage/eye irritation (Category 2)

16. OTHER INFORMATION

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/

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)	4/2/2020 ET
Reason for revision	Application of WHMIS labeling 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.