

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Trade name : TGS BUFFER, 10X  
 Product code : AB14028

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Laboratory use/Manufacturing component/Research

#### 1.3. Details of the supplier of the safety data sheet

AmericanBio, Inc.  
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 Natick, MA 01760 - USA  
 T 800.443.0600 - F 508.655.2754  
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#### 1.4. Emergency telephone number

Emergency number : 855.835.2572 (U.S.) :: 760.602.8703 (Outside U.S.)

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification (GHS-US)

Skin Irrit. 2 H315  
 Eye Irrit. 2A H319

#### 2.2. Label elements

##### GHS-US labeling

Hazard pictograms (GHS-US) :



GHS07

Signal word (GHS-US) : Warning  
 Hazard statements (GHS-US) : H315 - Causes skin irritation  
 H319 - Causes serious eye irritation  
 Precautionary statements (GHS-US) : P264 - Wash hands, forearms and face thoroughly after handling  
 P280 - Wear eye protection, protective clothing, 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  
 P321 - Specific treatment (see SECTION 4 on this label)  
 P332+P313 - If skin irritation occurs: Get medical advice/attention  
 P337+P313 - If eye irritation persists: Get medical advice/attention  
 P362 - Take off contaminated clothing and wash before reuse

#### 2.3. Other hazards

No additional information available

#### 2.4. Unknown acute toxicity (GHS-US)

No data available

### SECTION 3: Composition/information on ingredients

#### 3.1. Substance

Not applicable  
 Full text of H-phrases: see section 16

#### 3.2. Mixture

Name	Product identifier	%	Classification (GHS-US)
water, reagent grade, usp purified	(CAS No) 7732-18-5	> 75	Not classified

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Name	Product identifier	%	Classification (GHS-US)
glycine	(CAS No) 56-40-6	10 - 20	Not classified
tris(hydroxymethyl)aminomethane	(CAS No) 77-86-1	< 10	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335
sodium dodecyl sulfate	(CAS No) 151-21-3	< 1	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : Assure fresh air breathing. Allow the victim to rest.
- First-aid measures after skin contact : Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Consult a doctor/medical service. Get medical advice/attention. Specific treatment (see Consult a doctor/medical service on this label).
- First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.
- First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

#### 4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries after skin contact : Causes skin irritation.
- Symptoms/injuries after eye contact : Causes serious eye irritation.

#### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

- suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
- Unsuitable extinguishing media : Do not use a heavy water stream.

#### 5.2. Special hazards arising from the substance or mixture

No additional information available

#### 5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

- Emergency procedures : Evacuate unnecessary personnel.

##### 6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
- Emergency procedures : Ventilate area.

#### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

#### 6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

#### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

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### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

- Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work. Provide good ventilation in process area to prevent formation of vapor.
- Hygiene measures : Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work.

#### 7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Direct sunlight. Keep container closed when not in use.
- Incompatible products : Strong bases. strong acids.
- Incompatible materials : Sources of ignition. Direct sunlight.

#### 7.3. Specific end use(s)

No additional information available

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

No additional information available

#### 8.2. Exposure controls

- Personal protective equipment : Avoid all unnecessary exposure.
- Hand protection : Wear protective gloves.
- Eye protection : Chemical goggles or safety glasses.
- Skin and body protection : Wear suitable protective clothing.
- Respiratory protection : Wear approved mask.
- Other information : When using, do not eat, drink or smoke.

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

- Physical state : Liquid
- Color : Colorless.
- Odor : characteristic.
- Odor threshold : No data available
- pH : No data available
- Relative evaporation rate (butyl acetate=1) : No data available
- Melting point : No data available
- Freezing point : No data available
- Boiling point : No data available
- Flash point : No data available
- Self ignition temperature : No data available
- Decomposition temperature : No data available
- Flammability (solid, gas) : No data available
- Vapor pressure : No data available
- Relative vapor density at 20 °C : No data available
- Relative density : No data available
- Solubility : No data available
- Log Pow : No data available
- Log Kow : No data available
- Viscosity, kinematic : No data available
- Viscosity, dynamic : No data available
- Explosive properties : No data available
- Oxidizing properties : No data available
- Explosive limits : No data available

#### 9.2. Other information

No additional information available

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### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

No additional information available

#### 10.2. Chemical stability

Not established.

#### 10.3. Possibility of hazardous reactions

Not established.

#### 10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

#### 10.5. Incompatible materials

strong acids. Strong bases.

#### 10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity : Not classified

glycine (56-40-6)	
LD50 oral rat	7930 mg/kg (Rat)

sodium dodecyl sulfate (151-21-3)	
LD50 oral rat	1288 mg/kg (977 mg/kg bodyweight; 1427 mg/kg bodyweight; Rat; Rat; Rat; Experimental value; Experimental value)
LD50 dermal rat	< 2000 mg/kg (Rat)
LD50 dermal rabbit	> 580 mg/kg (>500 mg/kg bodyweight; Rabbit; Rabbit)

tris(hydroxymethyl)aminomethane (77-86-1)	
LD50 oral rat	5900 mg/kg (Rat)

Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified
Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.
Symptoms/injuries after skin contact	: Causes skin irritation.
Symptoms/injuries after eye contact	: Causes serious eye irritation.

### SECTION 12: Ecological information

#### 12.1. Toxicity

glycine (56-40-6)	
LC50 fish 1	> 5 ppm (24 h; Lepomis macrochirus)
LC50 fish 2	> 5 ppm (24 h; Carassius auratus)

sodium dodecyl sulfate (151-21-3)	
LC50 fish 1	4.62 mg/l (96 h; Salmo gairdneri (Oncorhynchus mykiss); Nominal concentration)
EC50 Daphnia 1	6.3 - 7.8 mg/l (48 h; Daphnia magna; Static system)

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<b>sodium dodecyl sulfate (151-21-3)</b>	
EC50 other aquatic organisms 1	18 mg/l (168 h; Lemna sp.)
LC50 fish 2	7.97 mg/l (96 h; Brachydanio rerio)
EC50 Daphnia 2	12.6 mg/l (48 h; Daphnia pulex)
Threshold limit other aquatic organisms 1	40 mg/l (72 h; Protozoa)
Threshold limit algae 1	14.8 mg/l (72 h; Chlorophyta)
Threshold limit algae 2	0.02 mg/l (192 h; Scenedesmus quadricauda; Growth rate)

### 12.2. Persistence and degradability

<b>TGS BUFFER, 10X</b>	
Persistence and degradability	Not established.

<b>glycine (56-40-6)</b>	
Persistence and degradability	Readily biodegradable in water.
BOD (% of ThOD)	(5 day(s)) 0.86

<b>sodium dodecyl sulfate (151-21-3)</b>	
Persistence and degradability	Readily biodegradable in water.

<b>tris(hydroxymethyl)aminomethane (77-86-1)</b>	
Persistence and degradability	Biodegradability in water: no data available.

### 12.3. Bioaccumulative potential

<b>TGS BUFFER, 10X</b>	
Bioaccumulative potential	Not established.

<b>glycine (56-40-6)</b>	
Log Pow	-3.21 (Experimental value)
Bioaccumulative potential	Bioaccumulation: not applicable.

<b>sodium dodecyl sulfate (151-21-3)</b>	
BCF fish 1	3.9 - 5.3 (72 h; Cyprinus carpio)
BCF fish 2	7.15 (Pisces; Chronic)
Log Pow	1.6
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

<b>tris(hydroxymethyl)aminomethane (77-86-1)</b>	
Log Pow	-1.56
Bioaccumulative potential	Bioaccumulation: not applicable.

### 12.4. Mobility in soil

No additional information available

### 12.5. Other adverse effects

Other information : Avoid release to the environment.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.  
Ecology - waste materials : Avoid release to the environment.

## SECTION 14: Transport information

In accordance with DOT

No dangerous good in sense of transport regulations

### Additional information

Other information : No supplementary information available.

### ADR

Transport document description : UN N/A  
Packing group (ADR) : N/A

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Hazard identification number (Kemler No.) : N/A

Classification code (ADR) : N/A

### Transport by sea

No additional information available

### Air transport

No additional information available

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

#### glycine (56-40-6)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

#### sodium dodecyl sulfate (151-21-3)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

#### water, reagent grade, usp purified (7732-18-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

#### tris(hydroxymethyl)aminomethane (77-86-1)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

### 15.2. International regulations

#### CANADA

No additional information available

### EU-Regulations

No additional information available

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

### Classification according to Directive 67/548/EEC or 1999/45/EC

Not classified

#### 15.2.2. National regulations

No additional information available

### 15.3. US State regulations

No additional information available

## SECTION 16: Other information

Other information : None.

Full text of H-phrases: see section 16:

Acute Tox. 4 (Dermal)	Acute toxicity (dermal) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H302	Harmful if swallowed
H312	Harmful in contact with skin

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H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation

SDS US (GHS HazCom 2012)

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