



# Material Safety Data Sheet

## GHS-US Compliant

### 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### GHS product identifier

- Product Name: Buffer B
- Synonyms: None known
- Product Form: Liquid
- Catalog Number: RK-BB-1, RK-BB-4

#### Intended use of the product

- For research use only.
- In-vitro preparation, laboratory chemicals.

#### Supplier details

- Company Name: Phoenix Pharmaceuticals, Inc.
- Address: 300 Beach Road, Burlingame, CA 94010
- Telephone: 1-650-558-8898
- Fax: 1-650-558-1686
- Email: info@phoenixpeptide.com
- Web: www.phoenixpeptide.com

### 2. HAZARDS IDENTIFICATION

#### OSHA/HCS status

- Flammable liquids (Category 2).
- Acute toxicity, oral (Category 4).
- Acute toxicity, inhalation (Category 5).
- Acute toxicity, dermal (Category 5).
- Skin irritation (Category 2).
- Serious eye damage (Category 1).

#### Classification of the substance or mixture

- Not classified

#### GHS label elements

- Pictogram:



- Signal word: Corrosive, Flammable, Irritant
- Hazard statements:
  - H225: Highly flammable liquid and vapor.
  - H302: Harmful if swallowed.
  - H313: May be harmful in contact with skin.
  - H333: May be harmful if inhaled.
  - H315: Causes skin irritation.
  - H318: Causes serious eye damage.



**Precautionary statements**

- **Prevention:** P210: Keep away from heat/sparks/open flames/hot surfaces – no smoking.  
P261: Avoid breathing vapors.  
P264: Wash hands thoroughly after handling.  
P271: Use only outdoors or in a well-ventilated area.  
P280: Wear protective gloves/eye protection/face protection.
  
- **Response:** P308+P313: If exposed or concerned, get medical advice/attention.  
P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so, and continue rinsing.  
P302+P352: IF ON SKIN: Wash with soap and water.  
P362: Take off contaminated clothing and wash before use.
  
- **Storage:** P403+P233: Store in a well ventilated place. Keep container tightly closed.
  
- **Disposal:** P501: Dispose of contents/container in accordance with local regulations.
  
- **Other hazards:** No additional information available.

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**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**Substances**

- **Synonyms:** N/A
- **Substance / mixture:** N/A

Name	CAS No.	EINECS/ELINCS No.	Content	EU Hazard**
Component A	Proprietary	Proprietary	60%	C, Xi
Component B	Proprietary	Proprietary	< 1%	F, Xi
Water	7732-18-5	231-791-2	40%	N/A

\*\* T+ = Very toxic, T = Toxic, C = Corrosive, Xn = Harmful, Xi = Irritant, E = Explosive, F+ = Extremely flammable, F = Highly flammable, N = Dangerous for the environment, O = Oxidizing



## 4. FIRST AID MEASURES

### Description of first aid measures

- General advice
  - This product should be treated as a chemical substance.
  - Appropriate personal protective equipment should be worn at all times when handling this product.
  - In case of doubt or if symptoms persist, please seek medical attention immediately.
- In the event of exposure by inhalation
  - Remove the exposed person to open, fresh air.
  - If any respiratory complaints are reported, oxygen can be administered.
- In the event of splashes or contact with eyes
  - If necessary, remove contact lenses.
  - Rinse eyes thoroughly with a stream of clean water for at least 15 minutes, holding the eyelids open.
- In the event of swallowing
  - Rinse mouth with large amounts of water.
  - Do not induce vomiting unless directed to do so by medical personnel.
  - NEVER induce swallowing or administer anything orally to an unconscious person.
- In the event of contact with skin
  - Remove contaminated clothing and footwear and wash before reuse.
  - Wash the affected skin thoroughly with plenty of mild soap and water for at least 15 minutes.

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

- No data available.

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

- No data available.
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## 5. FIREFIGHTING MEASURES

- Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking.

### Extinguishing media

- Water spray, alcohol-resistant foam, carbon dioxide, dry chemical powder.

### Special hazards arising from the substance or mixture

- Hazardous decomposition products formed under fire conditions (carbon oxides, nitrogen oxides, hydrogen fluoride).

### Advice for firefighters

- Wear self-contained breathing apparatus if necessary.
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## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

- Wear suitable protective clothing, gloves, and eyewear (see Section 8 of MSDS).
- Evacuate all personnel to safe areas.
- Remove all sources of ignition.
- Ensure adequate ventilation. Avoid breathing vapors, mist, dust, or gas. Vapors can accumulate in low areas.

### Environmental precautions

- Dilute with plenty of water.
- Do not let product enter drains.
- Contain and control any leaks or spills with absorbent materials.
- Prevent pollution into sewage, surface, and ground water.
- Prevent soil pollution.

### Methods and material for containment and cleaning up

- Cover spillage with suitable absorbent material.
- Ventilate area of spill, and clean thoroughly with water and soap.
- Hold all material for appropriate disposal (section 13 of MSDS).

### Reference to other sections

- For required PPE, see section 8 of MSDS.
- For disposal, see section 13 of MSDS.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

- Keep away from sources of ignition.
- Avoid inhalation. Use in a well-ventilated area.
- Avoid contact with skin, eyes, and clothing.
- Always wash hands after handling.
- Use suitable protective means to work with the substance.
- Do not eat, drink, or smoke in areas where this product is used.

### Conditions for safe storage, including any incompatibilities

- Store in cool, well-ventilated area. Keep away from direct sunlight. Keep container sealed until ready for use.
- Recommended storage: +4°C.

### Specific end uses

- None known.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Control parameters

Component	CAS No.	Value	Control Parameters	Basis
Component B	Trade Secret	TWA	20 ppm	USA. ACGIH Threshold Limit Values (TLV)
		REMARKS: Lower respiratory tract irritation. Not classifiable as a human carcinogen. Danger of cutaneous absorption.		
		TWA	20 ppm 34 mg/m <sup>3</sup>	USA. NIOSH Recommended Exposure Limits
		REMARKS: Forms cyanide in the body.		
		TWA	40 ppm 70 mg/m <sup>3</sup>	USA. OSHA – Table Z-1 Limits for Air Contaminants, 1910.1000
		STEL	60 ppm 105 mg/m <sup>3</sup>	USA. OSHA – Table Z-1 Limits for Air Contaminants, 1910.1000



#### Exposure controls

- Appropriate engineering controls
    - Ensure laboratory is equipped with a safety shower and eye wash station.
  - Personal protection measures, such as personal protective equipment
    - Use clean personal protective equipment that has been properly maintained.
  - Eye protection
    - Use appropriate chemical safety goggles.
  - Hand protection
    - Use appropriate chemical resistive gloves.
    - Wash and dry hands before using.
  - Body protection
    - Wear appropriate protective clothing.
  - Respiratory protection
    - If requested by your safety advisor, use a suitable respirator.
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## 9. PHYSICAL AND CHEMICAL PROPERTIES

#### Information on basic physical and chemical properties

- Appearance: clear, colorless liquid
  - Odor: odorless
  - Solubility: fully soluble in water
  - Flammability: flammable
  - pH: no data available
  - Melting / freezing temperature: no data available
  - Boiling temperature (range): no data available
  - Flash point: no data available
  - Vapor pressure: no data available
  - Relative density: no data available
  - Partition coefficient: no data available
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## 10. STABILITY AND REACTIVITY

#### Reactivity

- Stable under recommended storage conditions.

#### Chemical stability

- Stable under recommended storage conditions.

#### Possibility of hazardous reactions

- Vapors may form explosive mixture with air.

#### Conditions to avoid

- Heat, flames, sparks.
- Direct sunlight.

#### Incompatible materials

- None known.

#### Hazardous decomposition products

- Under fire conditions: carbon oxides, nitrogen oxides, hydrogen fluoride.
  - Under other conditions: none known.
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## 11. TOXICOLOGICAL INFORMATION

### Information on toxicological effects

- Skin corrosion / irritation
    - Caustic effect on skin and mucous membranes.
  - Serious damage to eyes / eye irritation
    - Causes eye burns.
  - Respiratory or skin sensitization
    - May be harmful if inhaled. Material is destructive to the tissue of the mucous membranes and upper respiratory tract.
    - Harmful if absorbed through the skin. Causes skin burns.
  - Swallowing
    - Caustic effect on the mouth and throat.
    - Danger of perforation of the esophagus and stomach.
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## 12. ECOLOGICAL INFORMATION

### Toxicity

- No data available.

### Persistence and degradability

- No data available.

### Bioaccumulative potential

- No data available.

### Mobility in soil

- No data available.

### Results of PBT and vPvB assessment

- No data available.

### Other adverse effects

- Water hazard class 1: slightly hazardous for water.
  - Do not allow undiluted product or large quantities of it to reach ground water, bodies of water, or sewage system.
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## 13. DISPOSAL CONSIDERATIONS

### Waste treatment methods

- Waste management is carried out without endangering human health, without harming the environment, and without risk to water, air, soil, plants, or animals.
  - Waste
    - Recycle or dispose of waste in compliance with current state, federal, and/or national legislation, preferably via a specialized certified disposal company.
  - Soiled packaging
    - Contaminated packaging can be disposed of in a regulated landfill site or other method for hazardous or toxic wastes in accordance with state, federal, and/or national legislation.
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## 14. TRANSPORT INFORMATION

- This product does not meet the criteria for classification as hazardous transport.
- This product is not classified as environmentally hazardous according to the UN Model Regulations.
- This product is not classified as a marine pollutant according to the IMDG Code.

## 15. REGULATORY INFORMATION

### Safety, health and environmental regulations / legislation specific for the substance or mixture

- OSHA Hazards: flammable liquid, target organ effect, harmful by ingestion, harmful by skin absorption, corrosive.
- Sara 311/312 Hazards: fire hazard, acute health hazard, chronic health hazard.

### Chemical safety assessment

- A Chemical Safety Assessment has not been made for this product.

## 16. OTHER INFORMATION

Phoenix Pharmaceuticals, Inc. shall not be held liable for any damage resulting from handling or from contact with the above product. This material must only be handled by suitably qualified experienced scientists in appropriately equipped and authorized facilities. The above information is believed to be correct based on current knowledge, but does not purport to be all inclusive and should be used as a guide only for experienced personnel. Always consult your safety advisor and follow appropriate local and national safety legislature. The absence of warning must not, under any circumstance, be taken to mean that no hazard exists.

### Abbreviations:

CAS	Chemical Abstract Service
EC	European Council
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINKS	European List of Notified Chemical Substances
EMS	Express Mail Service
EU	European Union
MSDS	Material Safety Data Sheet
OSHA	Occupational Safety and Health Administration
PBT	Persistent, Bioaccumulative and Toxic
PPE	Personal Protective Equipment
STEL	Short Term Exposure Limit
TWA	Time Weighted Average
UN	United Nations
vPvB	Very Persistent and Very Bioaccumulative