

Safety Data Sheet

Section 1 : Identification

Product Name: PHOSPHATE BUFFERED SALINE (PBS)

Product Code: PBS-9990 (1L)

Product Form: Mixture

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

Laboratory reagent

Manufacturer Name: Bion Enterprises, Ltd.

Emergency Telephone Number: (847) 544-5044

Address: 455 State Street, Suite 100
Des Plaines, IL 60016

Telephone Number for Information: (847) 544-5044

Date Prepared: See bottom of page

Section 2: Hazards Identification

2.1 Classification of the substance or mixture

GHS Classification

Product is not classified as hazardous according to 29CFR 1910 (OSHA Hazard Communication Standard)

2.2 GHS label elements, including precautionary statements

Not a hazardous substance or mixture.

2.3 Other Hazards

Exposure may aggravate pre-existing eye, skin, respiratory conditions.

P- statements: 273, 501

For the full text of H-statements and P-statements mentioned in this Section, see Section 16.

Section 3: Composition / Information on Ingredients

3.1 Substance

Not applicable.

3.2 Mixture

A proprietary mixture of sodium chloride, sodium phosphate dibasic, and potassium phosphate monobasic. This mixture does not contain any hazardous substances when used in a manner which is consistent with the labeled directions.

Section 4: First-Aid Measures

4.1 Description of first aid measures

After inhalation

Fresh air. Consult a physician if feeling unwell.

After skin contact

Wash with plenty of water. Immediately remove any contaminated clothing. Treat affected areas with skin disinfectant. Consult physician.

After eye contact

In case of contact with eye flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

After swallowing

Rinse your mouth immediately. Do NOT induce vomiting. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

Not expected to present a significant hazard under anticipated conditions of normal use.

Inhalation: Prolonged exposure may cause irritation

Skin Contact: Prolonged exposure may cause skin irritation.

Eye Contact: May cause slight irritation to eyes.

Ingestion: Ingestion may cause adverse effects.

Chronic Symptoms: None expected under normal conditions of use.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Protection of First aiders: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

Section 5: Fire-Fighting Measures

5.1 Extinguishing media

Suitable extinguishing media

Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media

None known.

5.2 Special hazards arising from the substance or measure

Not combustible. Danger of formation of toxic pyrolysis products. Fire can cause: Carbon monoxide (CO), Carbon dioxide (CO₂)

5.3 Advice for firefighters

Special protective equipment for firefighters. In the event of fire, wear self-contained breathing apparatus. Fire residues and contaminated extinguishing water must be disposed of in accordance with local official regulations.

Section 6: Accidental Release Measures

6.1 Personal precautions, protective equipment, and emergency procedures

Advice for non-emergency personnel

Do not breathe vapours/aerosols. Avoid substance contact. Provide adequate ventilation. Evacuate the danger area. Follow emergency procedures. Consult an expert.

Advice for emergency responders

Protective equipment see Section 8.

6.2 Environmental precautions

Do not allow to enter into surface water, drains, or soil. Avoid release into the environment.

6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see Sections 7 and 10). Take up with liquid-absorbent material. Dispose of properly. Clean up affected area.

6.4 Reference to other sections

Indications about waste treatment see Section 13.

Section 7: Handling and Storage

7.1 Precautions for safe handling

Advice on safe handling

When using do not eat, drink, or smoke. Thorough skin-cleaning after handling the product. Avoid breathing dust.

Hygiene measures

Handle in accordance with good industrial hygiene and safety procedures.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool, and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Do not store in unlabeled containers. Store at 2°C to 8°C.

Storage class: 12 (non-combustible liquids)

Section 8: Exposure Controls/Personal Protection

8.1 Control parameters

Phosphate Buffered Saline: No data available.

8.2 Exposure Controls

Appropriate engineering controls

Provide adequate ventilation.

Personal protective equipment

Eye/Face protection

Protective safety glasses (goggles) with side protection approved under appropriate government standards such as NIOSH (US).

Skin/Hand protection

Wear protective gloves while handling the product. Dispose of contaminated gloves after use in accordance with the applicable laws and good laboratory practices.

Body protection

Wear suitable personal protective clothing.

Respiratory protection

Not required if the product is used as intended.

Control of environmental exposure

Do not allow to enter drains, waterways, or soil.

Section 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance/Color	Salt/Powder in foil pouch.
Odor	Odorless
Odor Threshold	No data available.
pH	Not applicable.
Melting point	No data available.
Boiling Point	No data available.
Flash point	No data available.
Evaporation rate	No data available.
Flammability (solid, gas)	No data available.
Upper flammability or explosive limit	No data available.
Lower flammability or explosive limit	No data available.
Vapor pressure	No data available.
Vapor density	No data available.
Relative density	No data available.
Water solubility	No data available.
Partition coefficient n-octanol/water	No data available.
Autoignition temperature	No data available.
Decomposition temperature	No data available.
Viscosity	No data available.

	Explosive properties	Not classified as an explosive
	Oxidizing properties	None
9.2	Other safety data	No additional information.

Section 10: Stability and Reactivity

- 10.1 Reactivity**
See section 10.3
- 10.2 Chemical Stability**
Stable under recommended storage temperature: 2°C to 8°C.
- 10.3 Possibility of hazardous reactions**
Hazardous polymerization will not occur.
- 10.4 Conditions to avoid**
Light, heat, moisture (will not cause a dangerous reaction but destroys the quality of the products).
- 10.5 Incompatible metals**
Avoid contact with strong oxidizing agents and strong bases.
- 10.6 Hazardous decomposition products**
Non expected under normal conditions of use.

Section 11: Toxicological Information

11.1 Information on toxicological effects

Acute toxicity
No data available.

Skin corrosion/irritation
No data available.

Serious eye damage/irritation
No data available.

Skin Sensitization
No data available.

Germ cell mutagenicity
No data available.

Carcinogenicity
No data available.

The mixture is not classified in carcinogenicity.

IARC: No ingredient of this product present at levels at or greater than or equal 0.1% is identified as probable, possible, or confirmed human carcinogen by IARC.

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

OSHA: No component of this product present at levels at or greater than or equal 0.1% is on OSHA's list of regulated carcinogens.

Reproductive toxicity
No data available.

Teratogenicity
No data available.

Specific target organ toxicity – single exposure
No data available

Specific target organ toxicity – repeated exposure

No data available.

Aspiration hazard

No data available.

11.2 Additional Information

Quantitative data on the toxicity of this product are not available.

Section 12: Ecological Information

12.1 Toxicity

Quantitative data on the toxicity of this mixture is not available.

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential

No bioaccumulation expected.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

This substance/mixture does not contain components in concentrations of 0.1% or higher classified as either persistent, Bioaccumulative and toxic (PBT) or very persistent and very Bioaccumulative (vPvB).

12.6 Endocrine disrupting properties

No data available.

12.7 Other adverse effects

Do not allow to enter drains, waterways, or soil.

12.8 Additional ecological information

Entry into the environment should be avoided.

Section 13: Disposal Considerations

13.1 Waste treatment methods

Waste should be disposed of in accordance with federal, state, and local environmental control regulations. Disposal of packaging according to the instructions of public authorities.

Section 14: Transportation Information

DOT (US)

Not dangerous goods.

IMDG

Not dangerous goods.

IATA

Not dangerous goods.

Further Information

Not classified as dangerous in the meaning of transport regulations.

Section 15: Regulatory Information

15.2 Chemical safety assessment

A chemical safety assessment was not carried out.

US Regulations

Sara 302 Components

These products do not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels.

Sara 313 Components

These products do not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants in accordance with the Clean Water Act (40 CFR 116.4)

U.S. State Right -to-know regulations**California Proposition 65**

These products do not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

Massachusetts Right to Know Components

No components are subject to the Massachusetts Right to Know Act.

New Jersey

No Components are subject to the New Jersey Right to Know Act.

Pennsylvania

No Components are subject to the Pennsylvania Right to Know Act.

Section 16: Other Information

Safety data for product including all components. This product is intended for professional laboratory use. This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Full text to the H-Statements mentioned in heading 2:

P273 Avoid release to the environment.

P501 Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

List of abbreviations:

ACGIH	American Conference of Governmental Industrial Hygienists
Ceiling	Maximum Limit Value
CWA	Clean Water Act
DOT	Department of Transportation
IATA	International Air Transport Association
IDLH	Immediately Dangerous to Life or Health
IMDG	International Maritime Code for Dangerous Goods
LD	Lethal Dose
NIOSH	National Institute for Occupational Safety and Health
OSHA	Occupational Safety & Health Administration
PBT	Persistent (P), Bioaccumulative (B), Toxic (T)
PEL	Permissible Exposure Limits
TLV	Threshold Limit Value
TWA	Time-weight Average
vPvB	Very persistent (vP), very Bioaccumulative (vB)

Disclaimer:

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information, and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal, and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.