

**Material Safety Data Sheet**  
**Version No.: 2.0(Rev. date 2020-04-17)**

**PBS**

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1. Product and Company Information

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Product Name : PBS

Recommended Use : For Research Use Only

Supply Information

○ Company : Bioneer

○ Address : 8-11 Munpyeongseo-ro, Daedeok-gu, Daejeon 34302, Republic of Korea

○ Emergency telephone number : 82-42-930-8777

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2. Hazards Identification

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GHS-Classification

Classification of the hazardous chemical

Skin irritation : Category 2

Eye irritation : Category 2

Label elements, including precautionary statements

Pictogram



Signal word : Dangerous

Hazard statements

H315 Causes skin irritation    H318 Causes serious eye irritation.

Precautionary statements

P264 Wash...thoroughly after handling.

P270 Do not eat, drink, smoking when using this product.

P280 Wear protective gloves/protective clothing/face protection/goggles

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### 3. Composition/Information on ingredient

Chemical name	Synonyms	CAS No.	Weight(%)
Sodium chloride		7647-14-5	10~20%
Potassium chloride		7447-40-7	1~5%
Sodium phosphate dibasic		7558-79-4	1~5%
Potassium phosphate monobasic		7778-77-0	0~1%
Water		7732-18-5	50~70%

### 4. First Aid measures

- . Eye contact : Rinse thoroughly with plenty of water for at least 15 minutes.
- . Skin Contact : Rinse thoroughly with plenty of water for at least 15 minutes.
- . Inhalation : Move to fresh air. If breathing is difficult, give oxygen.
- . Ingestion : Never give anything by mouth to an unconscious person.
- . The most important acute and delayed symptoms/effects : Not information available.
- . Notes to Physician : Not information available.

### 5. Fire-fighting measures

- . Suitable Extinguishing Media : Water-spray, Dry chemical, CO2.
- . Flammable Properties : No information available
- . Protective Equipment and Precautions for Firefighters : As in any fire, wear self-contained breathing apparatus pressure-demand and full protective gear.

### 6. Accidental release measures

- . Personal Precautions : Remove all ignition source. Prevent further spillage if safe to do so.
- . Environmental precautions : Absorb the sand or vermiculite. Prevent from waterway, drain, basement, close space.
- . Methods for cleaning up : Wash contaminated area with plenty of water if small leakage.  
Absorb with sand and inflammable material in small spill site.

### 7. Handling and Storage

- . Handling : Do not breathe vapours. Wash thoroughly after handling.
- . Storage : Keep containers tightly closed in a dry, cool and well-ventilated place.  
Store at room temperature.

### 8. Exposure control/personal protection

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- . Chemical exposure limits, biological exposure limits etc. : No information available.
  - . Engineering Measures : No information available.
  - . Personal Protective Equipment
    - Respiratory Protection : Wear respiratory mask approved by KOSHA(Korea Occupation Safety Health Agency).
    - Eye/Face Protection : Wear Chemical Safety protective goggle or glasses approved by KOSHA(Korea Occupation Safety Health Agency).
    - Skin Protection : Wear Chemical Safety gloves approved by KOSHA(Korea Occupation Safety Health Agency).
    - Body Protection : Wear protective clothes approved by KOSHA(Korea Occupation Safety Health Agency).
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## 9. Physical and chemical properties

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- . Appearance : Liquid, transparentness
  - . Odor : No data available
  - . Odor threshold : No information available
  - . pH : No information available
  - . Melting point/Freezing point : No information available
  - . Initial boiling point/range : No information available
  - . Flash point : No information available
  - . Evaporation rate : No information available
  - . Flammability (Solid, Liquid) : No information available
  - . Flammability Limits upper/lower : No information available
  - . Vapor pressure : No information available
  - . Solubility : No information available
  - . Vapor density : No information available
  - . Viscosity : No information available
  - . n octanol/water : No information available
  - . Autoignition temperature : No information available
  - . Decomposition temperature : No information available
  - . Specific gravity : No information available
  - . Molecular weight : No information available
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## 10. Stability and Reactivity

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- . Stability : Stable under recommended storage conditions.
- . Possibility of harmful response : No information available
- . Conditions to avoid (electric discharge, impact, vibration etc) : Ignition source of Heat, spark, flame
- . Material to avoid : Combustible materials
- . Hazardous Decomposition Products : No information available

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## 11. Toxicological information

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- . Principle routes of exposure
  - Respiratory: can be harmful if inhaled.
  - Ingestion : can be harmful if swallowed.
  - Eye/Skin : Harmful in contact with skin. Can be caused skin irritation.
- . Health effects
  - Acute toxicity : No data available
  - Skin corrosive or irritant : can be caused skin irritation.
  - Serious eye damage or irritant : can be caused eye irritation.
  - Respiratory irritability : No data available
  - Skin irritability : No data available
  - Carcinogenicity : No data available
  - Germ cell mutagenicity : No data available
  - Reproductive toxicity : 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
- . Numerical measures of toxicity(Acute toxicity estimates etc) : No data available

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## 12. Ecological Information

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- . Ecotoxicity effects: No data available
- . Residual and degradability : No data available
- . Bioaccumulation : No data available
- . Mobility : No data available
- . Other harmful effects : No data available

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## 13. Disposable considerations

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- . Waste disposal method : Dispose of material in accordance with formally disposal company.
- . Contaminated packaging : Dispose contents and vessel in accordance with regulation by the waste disposal law.

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#### 14. Transport Information

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- . UN Number : Not applicable
- . UN Proper Shipping Name : Not applicable
- . Transport hazard class : Not applicable
- . Packing group : Not applicable
- . Marine pollutant : Not applicable
- . The special vehicle Safety measures : Not applicable

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#### 15. Regulatory information

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- . Regulation by Industrial safety and health act : Not information available
- . Regulation by chemicals control act : Not information available
- . Regulation by Safety control of dangerous substance act : Not information available
- . Regulation by the waste control act : Not information available
- . Regulation by other domestic and foreign regulatory : Not information available

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#### 16. Other information

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Bioneer Corporation makes no warranty or representation to its completeness, accuracy or currency. This material is intended for use by persons with pertinent technical skills and at their discretion and risk. It is the responsibility of the user to determine the product's suitability for its intended use, the product's safe use, and the product's proper disposal. Disposal of hazardous material may be subject to federal, state or local laws or regulations.

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