

## Safety Data Sheet (SDS)

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Catalog Code Number:** 1046  
**Product Name:** HBTU  
**Supplier's Name:** Peptide Institute, Inc.  
**Address:** 7-2-9 Saito-Asagi, Ibaraki-Shi, Osaka 567-0085, Japan  
**Phone Number:** 81-72-643-4411  
**Fax Number:** 81-72-643-4422  
**Recommended uses:** Reagent  
**Restrictions on use:** Seek expert judgment as necessary.  
**Creation Date:** December 8, 2015  
**Revised:** September 4, 2024 (ver.3)

### 2. HAZARDS IDENTIFICATION

#### Classification of the substance or mixture

#### GHS classification

##### HEALTH HAZARDS

SKIN CORROSION/IRRITATION Category 2

SERIOUS EYE DAMAGE/ EYE IRRITATION Category 2

RESPIRATORY SENSITIZATION Category 1

SKIN SENSITIZATION Category 1

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) Category 3 (Respiratory tract irritancy)

Pictograms or hazard symbols



Signal word

Danger

#### Hazard statements

Causes skin irritation

May cause an allergic skin reaction

Causes serious eye irritation

May cause allergy or asthma symptoms or breathing difficulties if inhaled

May cause respiratory irritation

#### Precautionary statements

##### Prevention

Avoid breathing dust/fume/gas/mist/vapours/spray.

Wash skin thoroughly after handling.

Use only outdoors or in a well-ventilated area.

Contaminated work clothing should not be allowed out of the workplace.

Wear protective gloves/protective clothing/eye protection/face protection.

Wear respiratory protection.

##### Response

IF ON SKIN: Wash with plenty of soap and water.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Call a doctor if you feel unwell.  
If skin irritation occurs: Get medical advice/attention.  
If skin irritation or rash occurs: Get medical advice/attention.  
If eye irritation persists: Get medical advice/attention.  
If experiencing respiratory symptoms: Call a doctor.  
Take off contaminated clothing and wash it before reuse.

#### Storage

Store in a well-ventilated place. Keep container tightly closed.  
Store locked up.

#### Disposal

Dispose of contents/container to an approved waste disposal plant.

**Other hazards:** No data available

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Single Substance or Mixture:** Single Substance

**Common Chemical Name, Common Name or Substance Name:**

1-[Bis(dimethylamino)methylene]-1*H*-benzotriazolium 3-oxide hexafluorophosphate

**Molecular Formula:** C<sub>11</sub>H<sub>16</sub>N<sub>5</sub>O • PF<sub>6</sub> (M.W. 234.28 • 144.96)

**CAS Registry Number:** 94790-37-1

**EINECS No.:** -

**UN No. & Hazard Class:** This material is not classified as hazardous goods.

### 4. FIRST AID MEASURES

**Inhalation:** If inhaled, remove person to fresh air and keep comfortable for breathing. Wash your mouth and nasal cavity thoroughly with clean water and get medical attention.

**Skin contact:** In case of skin contact, wash with plenty of water. Call a doctor, if you feel unwell.

**Eye contact:** In case of contact with eyes, wash with plenty of water. Call a doctor, if you feel unwell.

**Ingestion:** If swallowed, rinse mouth. Call a doctor, if you feel unwell.

### 5. FIRE FIGHTING MEASURES

**Suitable Extinguishing media:** Water spray, carbon dioxide, dry chemical powder, or appropriate form.

**Unsuitable Extinguishing media:** Nothing special.

**Special extinguishing method:** Complies with fire extinguishing method in normal fire.

**Specific hazards arising from the chemical product:**

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures:**

Wear respirator, chemical safety goggles, rubber boots and heavy rubber gloves.

**Environmental precautions:**

To be careful not discharged to the environment without being properly handled waste water contaminated.

**Methods and materials for contaminant and methods and materials for cleaning up:**

Sweep up, place in a bag and hold for waste disposal. Avoid raising dust.

### 7. HANDLING AND STORAGE

**Handling:**

**Technical measures:** No data available

**Precautions for safe handling:** Avoid inhalation. Avoid contact with eyes, skin and clothing.

**Storage:**

**Condition for safe storage:** Keep container tightly closed. Store in a cool dry place.

**Recommended storage temperature:** 2-10 °C.

**Container and packaging materials for safe handling:** No data available

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering controls:** No data available

**Exposure limits:** No data available

**Concentration standard values under Japanese Safety and Health Act:** No data available

**Personal protective equipment:**

Wear appropriate respirator, chemical-resistant gloves, safety goggles, other protective clothing.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical state:** Solid (powder)

**Color:** White to pale yellow

**Odor:** No data available

**Melting point/freezing point:** No data available

**Boiling point or initial boiling point and boiling range:** No data available

**Flammability:** No data available

**Lower and upper explosion limit/flammability limit:** No data available

**Flash point:** No data available

**Auto-ignition temperature:** No data available

**Decomposition temperature:** No data available

**pH:** No data available

**Kinematic viscosity:** No data available

**Solubility:** Soluble in 10% DMF or CH<sub>3</sub>CN

***n*-Octanol/water partition coefficient:** No data available

**Vapor pressure:** No data available

**Density and/or relative density:** No data available

**Relative vapor density:** No data available

**Particle characteristics:** No data available

## 10. STABILITY AND REACTIVITY

**Reactivity:** No data available

**Chemical stability:** No data available

**Possibility of hazardous reactions:** No data available

**Conditions to avoid:** No data available

**Incompatible materials:** No data available

**Hazardous decomposition products:** No data available

## 11. TOXICOLOGICAL INFORMATION

**Acute toxicity:** No data available

**Skin irritation/corrosion:** GHS classification Category 2

**Serious eye damage/ irritation:** GHS classification Category 2

**Respiratory or skin sensitization:** GHS classification Category 1

**Reproductive cell mutagenicity:** No data available

**Carcinogenicity:** No data available

**Reproductive toxicity:** No data available

**STOT-single exposure:** GHS classification Category 3 respiratory tract irritation

**STOT-repeated exposure:** No data available

**Aspiration hazard:** No data available

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity:** No data available

**Persistence and degradability:** No data available

**Bioaccumulative potential:** No data available

**Mobility in soil:** No data available

**Hazards to ozone layer:** No data available

## 13. DISPOSAL CONSIDERATIONS

**Information on the safe and environmentally sound disposal or recycling of chemicals and contaminated containers and packaging:**

Obey local/national regulations.

## 14. TRANSPORT INFORMATION

**UN number and UN classification:** This material is not classified as hazardous goods.

**Regulatory information if there are Japanese regulations:** Not applicable.

## 15. REGULATORY INFORMATION

**Names of applicable Japanese laws and information on regulation based on those laws:** Not applicable.

Caution: The chemical, physical and toxicological properties of this product have not been thoroughly investigated. Exercise due care.

## 16. OTHER INFORMATION

**Disclaimer:** NOT FOR USE IN HUMANS. For R&D use only. Not for drug, household or other uses.

**Reference:**

1. JCIA: Japan Chemical Industry Association GHS support Guidelines (September, 2023)
2. JIS Z 7253:2019 Hazard communication of chemicals based on GHS-Labeling and Safety Data Sheet (SDS)
3. NITE: National Institute of Technology and Evaluation (JAPAN) web site
4. CAS SciFinder<sup>h</sup>

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