

# Safety Data Sheet



## 1. Identification of Substance/ Identification of Company

**Product:** HBTU

**Catalog #:** CXZ020

**Chemical Formula:** C<sub>11</sub>H<sub>16</sub>F<sub>6</sub>N<sub>5</sub>OP

**Synonyms:** O-(benzotriazol-1-yl)-N,N,N',N'-tetramethyluronium hexafluorophosphate

**Relevant Identified Uses:** Laboratory chemicals, manufacture of substances

**Supplier:** AAPPTec, LLC

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Louisville, Kentucky USA

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## 2. Hazards Identification

**GHS Classification in Accordance with 29 CFR 1910 (OSHA)**

**Skin Irritation (Category 2), H315**

**Eye Irritation (Category 2A), H319**

**Respiratory Sensitization (Category 1), H334**

**Skin Sensitization (Category 1), H317**

**Specific Target Organ Toxicity - Single Exposure (Category 3) Respiratory System, H335**

**GHS label elements**

**Pictogram:**



**Signal word:** Danger

**Hazard statements:**

H315

Causes skin irritation.

H317

May cause an allergic skin reaction

H319

Causes serious eye irritation.

H334

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335

May cause respiratory irritation

**Precautionary statements:**

P261

Avoid breathing dust.

P264

Wash skin thoroughly after handling

P271

Use only outdoors or in a well-ventilated area

P272

Contaminated work clothing should not be allowed out of the workplace

P280

Wear protective gloves/eye protection/face protection

P302+P352

IF ON SKIN: Wash with plenty of soap and water

P304+P340+P312

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a Poison Center or a doctor/physician if you feel unwell.

P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention
P337+P313	If eye irritation persists: Get medical advice/attention
P342+P311	If experiencing respiratory symptoms: Call a Poison Center or a doctor/physician.
P362	Take off contaminated clothing and wash before reuse.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up
P501	Dispose of contents/container to an approved waste disposal plant.

**Hazards Not Otherwise Classified (HNOC) or Not Covered by GHS:** none

### 3. Composition/ information on ingredients

**Substance/preparation:** Substance

**Chemical Name:** O-(benzotriazol-1-yl)-N,N,N',N'-tetramethyluronium hexafluorophosphate

**Chemical Formula:** C<sub>11</sub>H<sub>16</sub>F<sub>6</sub>N<sub>5</sub>OP

**Molecular Weight:** 397.2

**CAS #:** 94790-37-1

**EC #:** 423-020-5

**Hazardous Components**

**Component:** O-(benzotriazol-1-yl)-N,N,N',N'-tetramethyluronium hexafluorophosphate

**Classification:** Skin Irritant 2; Eye Irritant 2A; Respiratory Sensitization 1; Skin sensitization 1; STOT SE 3, H315, H317, H319, H334, H335

**Concentration:** 90-100%

### 4. First Aid Measures

**First Aid Measures**

**General Advice:** Consult a physician. Show this safety data sheet to the physician in attendance. Move out of the dangerous area.

**Inhalation:** If inhaled, move person to fresh air. If not breathing, give artificial respiration. Consult a physician

**Ingestion:** Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**Skin Contact:** Wash off with soap and plenty of water. Consult a physician.

**Eye Contact:** Rinse thoroughly with water for at least 15 minutes and consult a physician.

**Effects and Symptoms, Both Acute and Delayed**

The most important known symptoms and effects are described in the labeling (see section 2) and/or in section 11.

**Indication of Immediate Medical Attention and Special Treatment Needed**

No data available

## 5. Fire-fighting Measures

**Extinguishing Media:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Special Hazards Arising From the Substance or Mixture:** carbon oxides, nitrogen oxides (NO<sub>x</sub>), phosphorous oxides, hydrogen fluoride

**Advice for Firefighters:** Wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

**Further Information:** Use water spray to cool unopened containers..

## 6. Accidental Release Measures

**Personal Precautions:** Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

**Environmental Precautions:** Do not allow product to enter drains.

**Methods and Materials for Containment and Clean Up:** Pick up and arrange disposal without creating dust. Sweep up and shovel. Sweep up and shovel. Keep in suitable, closed containers for disposal.

**Reference to Other Sections:** For disposal see Section 13

## 7. Handling and Storage

**Handling:** Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Further processing of solid materials may result in formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see Section 2.

**Conditions for Safe Storage:** Keep container tightly closed in a dry and well-ventilated place. Recommended storage temperature: 2 - 8 °C. Light sensitive. Store under inert gas. Moisture sensitive  
Storage class (TRGS 510): Non-Combustible Solids

**Specific End Uses:** Apart from the uses mentioned in Section 1, no other specific uses are stipulated.

## 8. Exposure Controls/Personal Protection

**Control Parameters:** Contains no substances with occupational exposure limit values.

### Exposure Controls

**Appropriate Engineering Controls:** Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday

## Personal Protective Equipment

**Eye/Face Protection:** Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin Protection:** Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Full contact Material:** Nitrile rubber  
**Minimum layer thickness:** 0.11 mm  
**Break through time:** 480 min

**Splash contact Material:** Nitrile rubber  
**Minimum layer thickness:** 0.11 mm  
**Break through time:** 480 min  
**Test method:** EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection:** Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory Protection:** For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of Environmental Exposure:** Do not let product enter drains.

## 9. Physical and Chemical Properties

**Appearance:** White crystals

**Odor:** No data available

**Odor Threshold:** No data available

**pH:** No data available

**Melting Point:** 200 °C (392 °F) – dec.

**Boiling Point and Boiling Range:** No data available

**Flash Point:** No data available

**Evaporation Rate:** No data available

**Flammability (solid, gas):** 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

**Auto-Ignition Temperature:** No data available

**Decomposition Temperature:** No data available

**Viscosity:** No data available

**Explosive Properties:** No data available

**Oxidizing Properties:** No data available

## 10. Stability and Reactivity

**Reactivity:** No data available

**Chemical Stability:** Stable under recommended storage conditions.

**Possibility of Hazardous Reactions:** No data available

**Conditions to Avoid:** No data available

**Hazardous Decomposition Products**

**Other Decomposition Products:** No data available

**In Event of Fire:** See Section 5

## 11. Toxicological Information

**Acute Toxicity:** No data available

Dermal: No data available

**Skin Corrosion/Irritation:** No data available

**Serious Eye Damage/Eye Irritation**

**Respiratory or Skin Sensitization:** May cause sensitization by inhalation or skin contact

**Germ Cell Mutagenicity**

**Carcinogenicity:**

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

**ACGIH:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

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

**OSHA:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive Toxicity:** No data available

**Specific Target Organ Toxicity – Single Exposure:** No data available

Inhalation – May cause respiratory irritation

**Specific Target Organ Toxicity – Repeated Exposure:** No data available

**Aspiration Hazard:** No data available

**Additional Information:** RTECS Not available

Irritation, sensitization. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## 12. Ecological Information

**Toxicity:** No data available

**Persistence and Degradation:** No data available

**Bioaccumulative Potential:** No data available

**Mobility in Soil:** No data available

**Results of PBT and vPvB Assessment:** PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

**Other Adverse Effects:** No data available

## 13. Disposal Considerations

**Waste Treatment Methods – Product:** Contact a licensed professional waste disposal service to dispose of this material. Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator with an afterburner and scrubber

**Contaminated Packaging:** Dispose of as unused product.

## 14. Transportation

**DOT (US):** Not dangerous goods

**IMDG:** Not dangerous goods

**IATA:** Not dangerous goods

## 15. Regulatory Information

**REACH No.:** A registration number is not available for this substance as the substance or its uses are exempt from registration, the annual tonnage does not require a registration or the registration is envisioned for a later registration deadline.

**SARA 302 Components:** No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components:** This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards:** Fire hazard, Acute health hazard

**Massachusetts Right To Know Components:**

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

**Pennsylvania Right To Know Components:**

O-(benzotriazol-1-yl)-N,N,N',N'-tetramethyluronium hexafluorophosphate  
CAS-No: 94790-37-1 Revision Date:

**New Jersey Right To Know Components:**

O-(benzotriazol-1-yl)-N,N,N',N'-tetramethyluronium hexafluorophosphate  
CAS-No. 94790-37-1 Revision Date

**California Prop. 65 Components:** This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.)

## 16. Other Information

**Full Text of H-Statements Referred to Under Sections 2 and 3.**

H315	Causes skin irritation.
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335 May cause respiratory irritation  
STOT SE Specific target organ toxicity – single exposure

**Hazardous Material Information System (U.S.A.)**

Health	2
Fire Hazard	0
Reactivity	0
Personal Protection	

**National Fire Protection Association (U.S.A.)**



**Notice to Reader**

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