

## 1. Identification of Substance/ Identification of Company

**Product:** HOAt  
**Catalog #:** CXZ012  
**Chemical Formula:** C<sub>5</sub>H<sub>4</sub>N<sub>4</sub>O  
**Synonyms:** 1-Hydroxy-7-azabenzotriazole  
3H-[1,2,3]-Triazolo[4,5-b]pyridine-3-ol

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

**Supplier:** AAPPTec, LLC  
6309 Shepherdsville Road  
Louisville, Kentucky USA  
40228  
Telephone: 502-968-2223  
Fax: 502-968-3338

## 2. Hazards Identification

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

**Explosives (Division 1.4), H204**  
**Acute Toxicity, Oral (Category 3), H301**  
**Skin Irritation (Category 2), H315**  
**Serious Eye Damage (Category 1), H318**  
**Specific Target Organ Toxicity-Single Exposure (Category 3),  
Respiratory System, H335**

For the full text of the H-Statements mentioned in this section, see Section 16.

**GHS Label Elements:**

**Pictogram:**



**Signal Word:** Danger

**Hazard Statements:**

H204	Fire or projection hazard
H301	Toxic if swallowed
H315	Causes skin irritation
H318	Causes serious eye damage
H335	May cause respiratory irritation

**Precautionary Statements:**

P210	Keep away from heat/sparks/open flame/hot surfaces – No smoking
P240	Ground/bond container and receiving equipment
P250	Do not subject to grinding/shock/friction
P261	Avoid breathing dust/fume/gas/mist/vapors/spray
P264	Wash skin thoroughly after handling
P270	Do not eat, drink or smoke when using this product.

P271	Use only outdoors or in a well-ventilated area
P280	Wear protective gloves/eye protection/face protection
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
P302+P352	IF ON SKIN: Wash with plenty of soap and water
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. Continue rinsing.
P310	Immediately call a POISON CENTER or doctor/physician.
P330	Rinse mouth
P332+P313	If skin irritation occurs: Get medical advice/ attention.
P362	Take off contaminated clothing and wash before reuse.
P370+P380	In case of fire: evacuate area
P372	Explosion risk in case of fire
P373	DO NOT fight fire when fire reaches explosives
P401	Store in accordance with local regulations
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:** 1-Hydroxy-7-azabenzotriazole

**Formula:** C<sub>5</sub>H<sub>4</sub>N<sub>4</sub>O

**Molecular Weight:** 136.11 g/mol

**CAS #:** 39968-33-7

**EC #:** Not available.

**Hazardous Components:**

**Component:** 1-hydroxy-7-azabenzotriazole

**Classification:** Expl. 1.4; Acute Tox. 3; Skin Irrit. 2; Eye Dam. 1; STOT SE 3; H204, H301, H315, H318, H335

**Concentration:** -

For the full text of the H-Statements mentioned in this section, see Section 16.

### 4. First Aid Measures

#### First Aid Measures

- Inhalation:** If inhaled, move person to fresh air. If not breathing, give artificial respiration. Consult a physician
- Skin Contact:** Wash off with soap and plenty of water. Take victim immediately to a hospital. Consult a physician.
- Eye Contact:** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

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

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

The most important known symptoms and effects are described in Section 2 and/or Section 11

**Indication of Any Immediate Medical Attention**

No data available

## 5. Fire-fighting Measures

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

**Hazardous thermal decomposition products:** Oxides of carbon (CO, CO<sub>2</sub>), oxides of nitrogen (NO<sub>x</sub>).

**Advice for firefighters:** Firefighters should wear positive pressure self-contained breathing apparatus (SCBA) if necessary

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

## 6. Accidental Release Measures

**Personal Precautions:** Wear respiratory protection. Avoid dust formation. Avoid breathing dust, vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. For personal protection see Section 8

**Environmental Precautions:** Prevent further leakage or spillage s safe to do so. Do not allow product to enter drains.

**Methods and materials for containment and cleaning up:** Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable containers for disposal.

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

## 7. Handling and Storage

**Precautions for Safe Handling:** Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Avoid shock and friction. Keep away from sources of ignition – No smoking. Keep away from heat and sources of ignition. For precautions see Section 2.

**Conditions for Safe Storage:** Keep container tightly closed in a dry well-ventilated area. Recommended storage temperature: 2-8 °C  
May explode when heated. Heat sensitive.

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

## 8. Exposure Controls/Personal Protection

**Control Parameters**

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

### **Exposure Controls**

#### **Engineering Controls**

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

### **Personal Protective Equipment**

**Eye/Face Protection:** Face shield and safety glasses. 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. Flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory:** Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of Environmental Exposure:** Prevent further leakage or spillage if safe to do so. Do not allow product to enter drains.

## **9. Physical and Chemical Properties**

**Physical State:** Crystalline

**Color:** Light yellow

**Odor:** No data available

**Odor Threshold:** No data available

**pH:** No data available

**Melting Point:** 213 - 216 °C (415-421 °F)

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

**Flash Point:** No data available

**Evaporation Rate:** No data available  
**Flammability (solid, gas):** No data available  
**Upper/ Lower Flammability or Explosion Limits:** 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):** log Pow: 0.033  
**Auto-ignition Temperature:** No data available  
**Decomposition Temperature:** 198 °C (388 °F)  
**Viscosity:** No data available  
**Explosive Properties:** No data available  
**Oxidizing Properties:** No data available

**Other Safety Information:** 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:** Heat, flames and sparks  
**Incompatible Materials:** Strong oxidizing agents  
**Hazardous Decomposition Products:** Other decomposition products – No data available  
**In event of fire:** See Section 5

## 11. Toxicological Information

### Toxicological Effects

**Acute Toxicology:** No data available

Dermal – No data available

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

**Serious Eye Damage/ Eye Irritation:** No data available

**Respiratory or Skin Sensitization:** No data available

**Germ Cell Mutagenicity:** No data available

### 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 Organ Toxicity – Single Exposure:** Inhalation – May cause respiratory irritation

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

**Aspiration Hazard:** No data available

### Additional Information

**RTECS:** Not available

**Signs and Symptoms of Exposure:** 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 degradability:** No data available

**Bioaccumulative potential:** No data available

**Mobility in soil:** No data available

**PBT and PvBv assessment:** No data available

**Other adverse effects:** No data available

## 13. Disposal Considerations

### Waste Treatment Methods

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

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

## 14. Transportation

### DOT (US):

UN Number: 0481 Class: 1.4S Packing Group: II

Proper Shipping Name: Substances, explosive, n.o.s. (1-Hydroxy-7-azabenzotriazole)

Marine pollutant: No

Poison Inhalation Hazard: No

### IMDG:

UN Number: 0481 Class: 1.4S

EMS-No: F-B, S-Y

Proper Shipping Name: SUBSTANCES, EXPLOSIVE, N.O.S. (1-Hydroxy-7-azabenzotriazole)

Marine pollutant: No

### IATA:

UN Number: 0481 Class: 1.4S

Proper Shipping Name: Substances, explosive, n.o.s. (1-Hydroxy-7-azabenzotriazole)

## 15. Regulatory Information

**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:** No SARA hazards

### State Regulations:

**Massachusetts Right To Know Components:** No components are subject to the Massachusetts Right to Know Act

**Pennsylvania Right To Know Components:**

1-Hydroxy-7-azabenzotriazole  
CAS No: 39968-33-7  
Revision Date:

**New Jersey Right To Know Components:**

1-Hydroxy-7-azabenzotriazole  
CAS No: 39968-33-7  
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.**

Acute Tox.	Acute toxicity
Expl.	Explosives.
Eye Dam.	Serious eye damage
H204	Fire or projection hazard
H301	Toxic if swallowed
H315	Causes skin irritation
H318	Causes serious eye damage
H335	May cause respiratory irritation
Skin Irrit.	Skin irritation
STOT SE	Specific target organ toxicity – single exposure.

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

Health	2
Fire Hazard	0
Reactivity	4
Chronic Health Hazard	

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



**Notice to Reader**

To the best of aapptec's knowledge, the information contained in this data sheet is accurate. However, neither aapptec nor any of its distributors assumes any liability whatsoever for the accuracy or

completeness of the information contained herein. Any material may present unknown hazards and should be used with caution. Final determination of suitability of any material is the sole responsibility of the user. Although certain hazards are described herein, aaptec cannot guarantee that these are the only hazards that exist.

**Date of Issue: 03 March, 2016**