

## Material Safety Data Sheet

### SECTION 1 - PRODUCT IDENTIFICATION

Product Name           tert-Butyl (3-(5-((3aS,4S,6aR)-2-oxohexahydro-1H-thieno[3,4-d]imidazol-4-yl)pentanamido)propyl)carbamate  
 Alternate Name        BB 0278996  
 Supplier Info           AAPharmaSyn, LLC  
                               3915 Research Park Drive, Suite A1  
                               Ann Arbor, MI 48108

### SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENT

Substance Name        tert-Butyl (3-(5-((3aS,4S,6aR)-2-oxohexahydro-1H-thieno[3,4-d]imidazol-4-yl)pentanamido)propyl)carbamate  
 CAS #                   244760-24-5  
 Formula                C<sub>18</sub>H<sub>32</sub>N<sub>4</sub>O<sub>4</sub>S  
 Synonyms               None  
 RTECS Number         Not assigned

### SECTION 3 – HAZARDS IDENTIFICATION

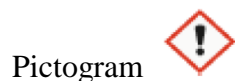
Caution: the physical, chemical, and toxicological properties of this molecule have not been thoroughly investigated.

#### Emergency Overview

OSHA Hazards: No known OSHA hazards

GHS Classification: Acute toxicity, Oral (Category 4), H302; Acute toxicity, Inhalation (Category 4), H332; Acute toxicity, Dermal (Category 4), H312

GHS Label elements, including precautionary statements:



Signal word Warning

Hazard statement(s)

H302 + H312 + H332 Harmful if swallowed, in contact with skin or if inhaled.

Precautionary statement(s)

P261           Avoid breathing dust/ fume/ gas/ mist/ vapours/ 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.

P273           Avoid release to the environment.

P280           Wear protective gloves/ protective clothing.

P301/P312	IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell.
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.
P330	Rinse mouth.
P501	Dispose of contents/ container to an approved waste disposal plant.

#### SECTION 4 – FIRST AID MEASURES

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

**If inhaled:** If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact:** Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact:** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

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

**Indication of any immediate medical attention and special treatment needed:** No data available

#### SECTION 5 – FIRE FIGHTING MEASURES

Flash point	Unknown
Autoignition temperature	Unknown
Flammability	Unknown
Extinguishing media	Water spray, carbon dioxide, dry chemical powder, or appropriate foam.
Special hazards	Carbon oxides, nitrogen oxides (NOx), sulfur dioxide
Firefighting	Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Emits toxic fumes under fire conditions.

#### SECTION 6 - ACCIDENTAL RELEASE MEASURES

**Personal precaution measures** Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Avoid breathing dust.

**Methods for cleaning** Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

## SECTION 7 – HANDLING AND STORAGE

Handling	Avoid inhalation. Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.
Storage	Keep tightly closed. Store under frozen conditions. Allow to warm to ambient temperature before opening container.

## SECTION 8 – EXPOSURE CONTROLS / PE

Engineering controls	Safety shower and eye bath. Mechanical exhaust required.
Personal protective equipment	When handling large quantities use government-approved respirator, compatible chemical-resistant gloves, chemical safety goggles. When handling smaller quantities use dust-mask, compatible chemical-resistant gloves, chemical safety goggles, and lab coat.
General hygiene measures	Wash thoroughly after handling. Wash contaminated clothing before reuse.

## SECTION 9 – PHYSICAL / CHEMICAL PROPERTIES

Appearance	Off white solid
Odor	None
Formula weight	400.54 g/mol
Melting point	Not determined
Water solubility	Not determined

## SECTION 10 – STABILITY AND REACTIVITY

Stability	Stable under storage conditions
Conditions to avoid	Store solid away from heat or humidity
Hazardous decomposition products	Carbon oxides, nitrogen oxides (NO <sub>x</sub> ), sulfur dioxide

## SECTION 11 – TOXICOLOGICAL INFORMATION

Caution: the physical, chemical, and toxicological properties of this molecule have not been thoroughly investigated.

**Acute toxicity**

Oral LD50

no data available

Inhalation LC50

no data available

Dermal LD50

no data available

Other information on acute toxicity

no data available

**Skin corrosion/irritation**

no data available

**Serious eye damage/eye irritation**

Mild eye irritant

**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

**Teratogenicity**

no data available

**Specific target organ toxicity - single exposure (Globally Harmonized System)**

no data available

**Specific target organ toxicity - repeated exposure (Globally Harmonized System)**

no data available

**Aspiration hazard**

no data available

**Potential health effects**

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.

Ingestion Harmful if swallowed.

Skin May be harmful if absorbed through skin. May cause skin irritation.

Eyes Causes eye irritation.

**Signs and Symptoms of Exposure**

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

**Synergistic effects**

no data available

**Additional Information**

RTECS: N/A

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## **SECTION 12 – ECOLOGICAL INFORMATION**

Mobility	Not defined
Degradability	Not defined
Accumulation	Not defined
Ecotoxicity	Not defined

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## **SECTION 13 – DISPOSAL CONSIDERATIONS**

Product	Offer surplus and non-recyclable solutions to a licensed disposal company.
Contaminated packaging	Dispose of as unused product.

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## **SECTION 14 – TRANSPORT INFORMATION**

### **DOT (US)**

Not dangerous goods

### **IMDG**

Not dangerous goods

### **IATA**

Not dangerous goods

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## **SECTION 15 – REGULATORY INFORMATION**

### **OSHA Hazards**

No known OSHA hazards

### **SARA 302 Components**

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

### **SARA 313 Components**

SARA 313: 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

### **Massachusetts Right To Know Components**

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

### **Pennsylvania Right To Know Components**

tert-Butyl (3-(5-((3aS,4S,6aR)-2-oxohexahydro-1H-thieno[3,4-d]imidazol-4-yl)pentanamido)propyl)carbamate

CAS-No. 244760-24-5

Revision Date: April 27, 2022

**New Jersey Right To Know Components**

tert-Butyl (3-(5-((3aS,4S,6aR)-2-oxohexahydro-1H-thieno[3,4-d]imidazol-4-yl)pentanamido)propyl)carbamate

CAS-No. 244760-24-5

Revision Date: April 27, 2022

**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.

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The material published in this Material Safety Data Sheet has been compiled from our experience and data presented in various technical publications. It is the user's responsibility to determine the suitability of this information for the adoption of necessary safety precautions. AAPharmaSyn makes no warranty or representation about the accuracy or completeness nor fitness for purpose of the information contained herein.

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