



# Safety Data Sheet

# **Azacitidine**

Cat#: orb321861

**Updated Date:** 7/29/2020

# Section 1. Product and Company Identification

Product Name Azacitidine

Catalog No. orb321861

Chemical Name (Synonyms) 4-Amino-1-(β-D-ribofuranosyl)-1,3,5-triazin-2(1H)-one, Ladakamycin, 5-azacytidine.

## Section 2. Hazards Identification

GHS Classification Acute toxicity, Oral (Category 4) H302

Carcinogenicity (Category 1B) H350

# GHS Label elements including precautionary statements





Pictogram:

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Signal word: Danger

**Hazard statement** 

# Hazard and precautionary statements

H302 - Harmful if swallowed.

H350 - May cause cancer.

# **Precautionary statements**

P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

P264 - Wash skin thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product.

P280 - Wear protective gloves, protective clothing, eye protection, face protection.

P301 + P312 + P330 - IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.

P308 + P313 - IF exposed or concerned: Get medical advice/attention.

P405 - Store locked up.

P501 - Dispose of contents/ container to an approved waste disposal plant.





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#### **HMIS Classification**

Health hazard: 1

Chronic health hazard: \*

Flammability: 0

Physical hazard: 0

**NFPA Rating** 

Health hazard: 1

Fire: 0

Reactivity hazard: 0

## **Potential Health Effects**

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

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

Eyes: May cause eye irritation.

Ingestion: Acute toxicity. Harmful if swallowed.

Carcinogenicity - May cause cancer.

# Section 3. Composition/Information on Ingredients

**Substances** Ingredient: Title Compound Percent: 100

Formula C8H12N4O5 Formula Wt. 244.20

CAS No. 320-67-2 EC No.

#### 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.

Eye Contact Flush eyes with water as a precaution.

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

**Inhalation** If breathed in, move person into 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.

# **Section 5. Firefighting Measures**

#### **Flash Point**

Not available.

# **Extinguishing Media**

Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.

# **Firefighting Procedures**

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Wear self-contained breathing apparatus for firefighting if necessary.

#### **Unusual Fire Hazards**

Not available.

#### Section 6. Accidental Release Measures

## **Personal Precautions**

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

#### **Environmental Precautions**

Do not let product enter drains.

# Methods and materials for containment and cleanup

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 contact with skin and eyes. Avoid formation of dust and aerosols. Further processing of solid materials may result in the 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.

#### **Storage Conditions**

Keep container tightly closed in a dry and well-ventilated place.

Recommended storage temperature: Ambient

# **Hazardous Decomposition Products**

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx).

# **Other Remarks**

Storage class (TRGS 510): 6. 1D: Noncombustible, acute toxic Cat. 3, toxic hazardous materials or hazardous materials causing chronic effects.

# **Section 8. Exposure Controls/Personal Protection**

## Personal protective equipment

# **EXPOSURE CONTROLS**

Contains no substances with occupational exposure limit values.

Hazardous components without workplace control parameters.

Handle in accordance with good industrial hygiene and safety practice.

Wash hands before breaks and at the end of workday.

# PERSONAL PROTECTION



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**Eye/face protection:** Safety glasses with side-shields conforming to EN 166. 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.

**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:** 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).

# Section 9. Physical and Chemical Properties

Physical State Solid. Color White or almost white crystalline powder.

**Boiling Point** Not available. **Volatility** Not available.

Melting Point 226-232°C Density Not available.

**Solubility** Soluble in water, but unstable. **pH** Not available.

Flash Point Not available. **Ignition temperature** Not available.

**Lower explosion limit** Not available. **Autoignition temperature** Not available.

**Upper explosion limit** Not available. **Vapor pressure** Not available.

Water solubility Soluble in water, but unstable. Odor Not available.

Partition coefficient Not available.

n-octanol/water

Odor Threshold Not available.

**Relative vapor density** Not available. **Evaporation rate** Not available.

Section 10. Stability and Reactivity

Stability

Stable under recommended storage conditions.

**Materials To Avoid** 

Strong oxidizing agents.

**Hazardous Decomposition Products** 

Not available.

Possibility of hazardous reactions

Not available.





# Conditions to avoid

Not available.

**Section 11. Toxicological Information** 

Oral LD50

Mouse - 572 mg/kg

**Inhalation LC50** 

Not available.

**Dermal LD50** 

Not available.

Other information on acute toxicity

Not available.

**Reproductive Toxicity** 

Not available.

Specific organ toxicity single exposure (GHS)

Not available.

Specific organ toxicity repeated exposure (GHS)

Not available.

Teratogenicity

Not available.

Skin corrosion/irritation

Not available.

Serious eye damage/irritation

Not available.

Respiratory or skin sensitization

Not available.

Germ cell mutagenicity

May alter genetic material.

**Aspiration Hazard** 

Not available.

**Synergistic effects** 

Not available.

**Additional Information** 

RTECS: Not available.

Signs and symptoms of exposure



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Nausea, headache, vomiting, liver injury may occur. Stomach - irregularities - based on human evidence.

#### **Potential Health Effects**

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

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

Eyes - May cause eye irritation.

Ingestion - Acute toxicity. Harmful if swallowed.

Carcinogenicity - May cause cancer.

# Carcinogenicity

This product is or contains a component that has been reported to be probably carcinogenic based on its IARC, OSHA, ACGIH, NTP or EPA classification. Possible human carcinogen.

**IARC:** 2A - Group 2A: Probably carcinogenic to humans (2-(-D-Ribofuranosyl)-4-amino-1,3,5-triazin-2-one).

**NTP:** RAHC - Reasonably anticipated to be a human carcinogen (2-(-D-Ribofuranosyl)-4-amino-1,3,5-triazin-2-one).

**OSHA:** No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

# **Section 12. Ecological Information**

Toxicity Not available.

Mobility in soil Not available.

# PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/ not conducted.

Persistence and degradability Not available.

Other adverse effects Not available.

Bioaccumulative potential Not available.

# **Section 13. Disposal Considerations**

# **Waste Disposal**

Dispose of material according to all federal, state, and local regulations.

Offer material to a licensed, professional waste disposal company to dispose of as unused product. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company.

# **Section 14. Transport Information**

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

**IATA** Not dangerous goods.

**IMDG** Not dangerous goods.





# **Section 15. Regulatory Information**

# Reach No.

**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 Components Acute health hazard.

Massachusetts Right To Know Components Azacitidine CAS #: 320-67-2 Revision Date: 1993-04-24

# Pennsylvania Right

To Know Components Azacitidine CAS #: 320-67-2 Revision Date: 1993-04-24

New Jersey Right to Know Components Azacitidine CAS #: 320-67-2 Revision Date: 1993-04-24

# California Prop 65 Components

WARNING! This product contains a chemical known to the State of California to cause cancer. Azacitidine CAS #: 320-67-2 Revision Date: 2007-09-28

## **Section 16. Other Information**

#### Other information

The information in this document is believed to be correct but is not necessarily complete. Biorbyt does not guarantee the accuracy of the information. The burden of verifying the information in this document rests solely upon the user.