

SAFETY DATA SHEET

NAME OF PRODUCT N₄-Aminocytidine

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product/Catalog Number(s):

60-160 2.5 mg/vial, 1 vial/kit
60-162 2.5 mg/vial, 5 vials/pack

Product name: N₄-Aminocytidine

Synonyms: Cytidine, N4-amino-, uridine, 4-hydrazone, NHC

Manufacturer: Molecular Toxicology Inc.

Address: 157 Industrial Park Drive, Boone, North Carolina, 28607

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Emergency contact (Chemtrec): Contact 1800-424-9300 (USA) or 703 527 3887 (International) at other times
Email: chemtrec@chemtrec.com; <http://www.chemtrec.com/>

Recommended use: Laboratory, For Research Only

Restrictions on use: Not for clinical use

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture per GSH and EU Directive 1272/2008



Warning

Physical hazards

None known

Health hazards

Acute Toxicity, Oral (Category 4)
Acute Toxicity, Inhalation (Category 4)
Acute Toxicity, Dermal (Category 4)

Environmental hazards

See eco-toxicity section 12.

2.1 Labelling

Hazard Statements

H302+312+332 Harmful if swallowed, in contact with skin, or if inhaled

Precautionary Statements

P261 Avoid breathing dust/fume/gas/mist/vapors/spray
P264 Wash skin thoroughly after handling
P270 Do not eat, drink, or smoke while using this product
P271 Use only outdoors or in well-ventilated area
P280 Wear protective gloves/clothing
P301+312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
P302+352 IF ON SKIN: Wash with plenty of soap and water
P304+340 IF INHALED: Remove victim to fresh air and keep at rest in a

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position comfortable for breathing
P363 Wash contaminated clothing before reuse
P501 Dispose of contents/container to an approved waste disposal plant

Other hazards

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Mixtures

Component	Purpose	CAS-No	EC-No.	Weight %
N ₄ -Aminocytidine C ₉ H ₁₄ N ₄ O ₅	Biochemical used in the study of carcinogenesis	57294-74-3		100%

SECTION 4. FIRST AID MEASURES

4.1 Description of first aid measures

Eye Contact	Rinse eyes and under eyelids immediately with plenty of water. Get immediate medical attention.
Skin Contact	Wash off immediately with plenty of soap and water and rinse thoroughly. Seek immediate medical advice.
Ingestion	Get medical attention immediately. Rinse mouth with plenty of water.
Inhalation	Move to fresh air. If required, provide artificial respiration. Get medical attention immediately.
Protection of first-aiders	Not required

In the event that symptoms develop or persists, obtain medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Acute: No data available
Chronic: No data available

4.3 Indication of any immediate medical attention and special treatment needed

Seek medical attention if ingested or if breathing difficulties are observed.

SECTION 5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Use media suitable for extinguishing surrounding fire (carbon dioxide, extinguishing powder or water spray). Fight larger fires with water spray or alcohol resistant foam.

5.2 Special hazards arising from the substance or mixture

Hazardous thermal decomposition products: Carbon dioxide, carbon monoxide, nitrogen oxides

5.3 Advice for firefighters

Fire-fighters should wear fully protective impervious protective equipment and self-contained breathing apparatus (SCBA).

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

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

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and material for containment and cleaning up

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

6.4 Reference to other sections

Refer to Sections 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use only in a well-ventilated area. Wash contaminated clothing before reuse. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink, or smoke while using this product.

7.2 Conditions for safe storage, including any incompatibilities

Store according to product packaging, tightly sealed. Keep in a dry, well-ventilated place. Recommended storage temperature: 2-8°C.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Exposure limits

Component does not require monitoring at the workplace.

Monitoring methods

N/A

8.2 Exposure controls

Engineering Measures

Ensure adequate ventilation, especially in confined areas

Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimize release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source.

Personal protective equipment

Eye Protection: Safety Glasses

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Hand Protection

Chemical resistant gloves; nitrile rubber recommended. Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves (refer to manufacturer/supplier for information). If material is solubilized, account for solvent in glove assessment.

Remove gloves with care avoiding skin contamination.

Skin and body protection

Appropriate laboratory work clothing; labcoat recommended

Respiratory Protection

Not necessary if used in small concentrations. If high concentrations are present or in an emergency situation utilize a suitable respirator.

Hygiene Measures - Handle in accordance with good industrial hygiene and safety practice. Wash hands, forearms and face thoroughly after handling chemical products, before smoking, eating and using lavatory, and at the end of the work period. Employ techniques to avoid contamination of clothing. Keep away from food, beverages, and feed.

Environmental exposure controls – Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

8.3 Exposure limits

Permissible Exposure Limits and Threshold Limit Values not specified by OSHA.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Solid Powder
Auto-ignition temperature	No data available
Boiling point	555.50°C
Decomposition temperature	No data available
Flammable limits in air	No data available
Flash point	289.76°C
Formula	C ₉ H ₁₄ N ₄ O ₅
Melting point	199.12°C
Molecular weight	258.23 g/mol
Odor threshold	Strong odor
Osmolality	No data available
pH	N/A
Partition coefficient	-2.82
Solubility in water	Not soluble
Specific gravity	1.94 g/mL at 20°C
Vapor density	1 (air = 1)
Vapor pressure	N/A
Viscosity	N/A

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N/A Not applicable

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity

Not reactive.

10.2 Chemical stability

Stable under normal conditions. Decomposition will not occur if used and stored appropriately.

10.3 Possibility of hazardous reactions

No hazardous reactions known.

10.4 Conditions to avoid

Extreme temperatures and direct sunlight

10.5 Incompatible materials

Strong oxidizers

10.6 Hazardous decomposition products

Carbon monoxide, carbon dioxide, nitrogen oxides

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

No data available

Other information on acute toxicity

None 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

Hamster

Lungs

Mutation in mammalian somatic cells.

Carcinogenicity

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

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NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential 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)

Skin, cardiovascular system, eyes, liver

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

No data available

Aspiration hazard

No data available

Potential health effects

Inhalation No data available

Ingestion No data available

Skin No data available

Eyes No data available

Synergistic effects

No data available

Additional toxicological information:

RTECS: YU8055000

SECTION 12. ECOLOGICAL INFORMATION

Toxicity

May cause long-lasting harmful effects to aquatic life.

Aquatic ecotoxicity: No data available.

Persistence and degradability: No data available.

Behavior in environment systems: No data available.

Bioaccumulative potential: No data available.

Mobility in soil: No data available.

Additional ecological information: None available

Results of PBT and vPvB Assessment

PBT: Not applicable

vPvB: Not applicable

Other adverse effects: *No further relevant information available.*

SECTION 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Dispose of in accordance with National, Federal and Local regulations. The information presented only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to

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determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Disposal should be in accordance with applicable regional, national and local laws and regulations.

SECTION 14. TRANSPORT INFORMATION

Not a hazardous material for transportation

DOT regulations:

Hazard class: None

Land transport ADR/RID (cross-border)

ADR/RID class: None

Maritime transport IMDG:

IMDG Class: None

Marine pollutant: No

Air transport ICAO_TI and IATA-DGR:

IOCAO/IATA Class: None

Special precautions for user: Not applicable

Transport/Additional information: Not dangerous according to the above specification.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable

SECTION 15. REGULATORY INFORMATION

SARA 302 Components

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

SARA 313 Components

SARA 313: No chemicals in this product are subject to reporting requirements of SARA Title III, Section 313.

SARA 311/312 Hazards

Acute Health Hazard

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act

Pennsylvania Right To Know Components

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New Jersey Right To Know Components

57294-74-3 N₄-Aminocytidine

California Prop. 65 Components

This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16. OTHER INFORMATION

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Molecular Toxicology, Inc. shall not be held liable for any damage resulting from handling or from contact with the above product. See www.moltox.com and/or the invoice or packing slip for additional terms and conditions of sale.