



**SIGMA-ALDRICH**

## Material Safety Data Sheet

Date Printed: 04/27/2007  
Date Updated: 02/04/2006  
Version 1.30

### Section 1 - Product and Company Information

**Product Name** 5-Aza-2'-deoxycytidine, Minimum 95%  
**Product Number** A3656  
**Brand** Sigma Chemical

**Company** Sigma-Aldrich  
**Street Address** 3050 Spruce Street  
**City, State, Zip, Country** SAINT LOUIS, MO 63103 US  
**Technical Phone:** 800-325-5832  
**Fax:** 800-325-5052

**Emergency Phone:** 314-776-6555

### Section 2 - Composition/Information on Ingredient

<u>Substance Name</u>	<u>CAS #</u>	<u>SARA 313</u>	<u>EC no</u>	<u>Annex I Index Number</u>
5-AZA-2'-DEOXYCYTIDINE	None	No		
<b>Formula</b>	C8H12N4O4			
<b>Synonyms</b>				

### Section 3 - Hazards Identification

#### Emergency Overview

Toxic.  
May cause harm to the unborn child. Harmful by inhalation, in contact with skin and if swallowed. May cause sensitization by skin contact. Irritating to eyes, respiratory system and skin.  
Possible mutagen. Target organ(s): Bone marrow. Immune system.

**HMIS Rating**  
Health: 3\* Flammability: 0 Reactivity: 0

**NFPA Rating**  
Health: 3 Flammability: 0 Reactivity: 0

\*additional chronic hazards present.

For additional information on toxicity, please refer to Section 11.

### Section 4 - First Aid Measures

#### Immediate Treatment - Work Site

In case of contact, immediately flush eyes or skin with copious amounts of water for at least 15 minutes while removing contaminated clothing and shoes.

#### Oral Exposure

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

#### Inhalation Exposure

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

#### Eye Exposure

Assure adequate flushing of the eyes by separating the eyelids with fingers.

### Section 5 - Fire Fighting Measures

**Autoignition Temp:** N/A

#### Extinguishing Media

##### Suitable

Water spray, Carbon dioxide, dry chemical powder, or appropriate foam.

#### Firefighting

##### Protective Equipment

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

##### Specific Hazard(s)

Emits toxic fumes under fire conditions.

#### Exposure Hazard(s)

##### Material

Sensitizer. Irritant.

### Section 6 - Accidental Release Measures

#### Procedure(s) of Personal Precaution(s)

Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.

#### Methods for Cleaning Up

Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

### Section 7 - Handling and Storage

#### Handling

##### User Exposure

Do not breathe dust. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure.

#### Storage

##### Suitable

Keep tightly closed.

### Section 8 - Exposure Controls / PPE

#### Engineering Controls

Use only in a chemical fume hood. Safety shower and eye bath.

#### Personal Protective Equipment

##### Other

Wear appropriate government approved respirator, chemical-resistant gloves, safety goggles, other protective clothing.

#### General Hygiene Measures

Wash contaminated clothing before reuse. Wash thoroughly after handling.

### Section 9 - Physical/Chemical Properties

Appearance	
Physical State	Solid
Molecular Weight:	228.2 AMU
pH	N/A
BP/BP Range	N/A
MP/MP Range	N/A
Freezing Point	N/A
Vapor Pressure	N/A
Vapor Density	N/A
Saturated Vapor Conc.	N/A
SG/Density	N/A
Bulk Density	N/A
Odor Threshold	N/A
Volatile%	N/A
VOC Content	N/A
Water Content	N/A
Solvent Content	N/A
Evaporation Rate	N/A
Viscosity	N/A
Partition Coefficient	N/A
Decomposition Temp.	N/A
Flash Point °F	N/A
Flash Point °C	N/A
Explosion Limits	N/A
Flammability	N/A
Autoignition Temp	N/A
Solubility	N/A

N/A = not available

### Section 10 - Stability and Reactivity

Stability	Stable
Stable	Stable.
Materials to Avoid	Strong oxidizing agents.
Hazardous Decomposition Products	
Hazardous Decomposition Products	Carbon monoxide, Carbon dioxide, Nitrogen oxides.

#### Hazardous Polymerization Hazardous Polymerization Will not occur.

### Section 11 - Toxicological Information

Route of Exposure	Inhalation
	Material is irritating to mucous membranes and upper respiratory tract.
Multiple Routes	Harmful if swallowed, inhaled, or absorbed through skin. Causes eye and skin irritation.
Sensitization	Skin
	May cause allergic skin reaction.
Target Organ(s) or System(s)	Bone marrow, Immune system, Eyes, Kidneys, Liver, Heart.
Signs and Symptoms of Exposure	Exposure can cause myelosuppression and vomiting.
RTECS Number:	N/A
Chronic Exposure - Teratogen	Result: May cause congenital malformation in the fetus.

### Section 12 - Ecological Information

No data available.

### Section 13 - Disposal Considerations

**Appropriate Method of Disposal of Substance or Preparation**  
Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

### Section 14 - Transport Information

DOT	Proper Shipping Name: None
	Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.
IATA	Non-Hazardous for Air Transport: Non-hazardous for air transport.

### Section 15 - Regulatory Information

EU Additional Classification	
Symbol of Danger:	T
Indication of Danger	Toxic.
Risk Statements	R: 61 20/21/22 36/37/38 43
	May cause harm to the unborn child. Harmful by inhalation, in contact with skin and if swallowed. Irritating to eyes, respiratory system and skin. May cause sensitization by skin contact.
Safety Statements	S: 53 22 26 36/37/39 45
	Avoid exposure - obtain special instructions before use. Do not breathe dust. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves, and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

**US Classification and Label Text****Indication of Danger**

Toxic.

**Risk Statements**

May cause harm to the unborn child. Harmful by inhalation, in contact with skin and if swallowed. May cause sensitization by skin contact. Irritating to eyes, respiratory system and skin.

**Safety Statements**

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves, and eye/face protection. Do not breathe dust.

**US Statements**

Possible mutagen. Target organ(s): Bone marrow. Immune system.

**United States Regulatory Information**

**SARA Listed:** No

**Notes:** This product is subject to SARA section 313 reporting requirements. This product is subject to SARA section 313 reporting requirements.

**Canada Regulatory Information****WHMIS Classification**

This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

**DSL:** No

**NDSL:** No

---

**Section 16 - Other Information**

---

**Disclaimer**

For R&D use only. Not for drug, household or other uses.

**Warranty**

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 and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2007 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.

