

# Safety Data Sheet

## SAFETY DATA SHEET - LC LABORATORIES REVISION DATE: JULY 1, 2019

### SECTION 1. IDENTIFICATION:

Trade name: Decitabine, Free Base  
Product Number: [D-3899](#)  
Manufacturer/Supplier:  
LC Laboratories  
165 New Boston Street  
Woburn, MA 01801 USA  
1-781-937-0777 Fax: 1-781-938-5420

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### SECTION 2. HAZARD(S) IDENTIFICATION:

Hazard Description: Harmful; Irritant  
RTECS Substance category: Drug; Mutagen; Human Data; Reproductive Effector  
Harmful if swallowed, inhaled, or absorbed through the skin  
Ingestion may cause myelosuppression (suppression of the bone marrow's production of blood cells and platelets), anemia, neutropenia (type of reduced white blood cell count), thrombocytopenia (decreased blood platelets), febrile neutropenia (development of fever/other signs of infection in association with abnormally low number of a certain type of white blood cells), vomiting, alopecia (hair loss), pyrexia (fever), phlebitis (inflammation of the veins), neuropathy, mucositis (inflammation and ulceration of the mucous membranes lining the digestive tract), fatigue, nausea, headache, cough, petechiae (tiny red dots on the skin), constipation, diarrhea, and hyperglycemia (elevated serum glucose level), hypomagnesemia (reduced serum magnesium level), hypokalemia (reduced serum potassium level), arthralgia (joint pain), pneumonia, *Mycobacterium avium* complex infection, cardio-respiratory arrest, elevated serum bilirubin level, intracranial hemorrhage, abnormal liver function tests, atrial fibrillation, edema, tachycardia (abnormally rapid heart rate), depression, pharyngitis (sore throat)  
Exposure may impair fertility and may be harmful to a developing fetus  
Causes irritation of the skin, eyes, mucous membranes, and upper respiratory tract

Signal Word: Danger

#### GHS Hazard Statements:

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

#### GHS Precautionary Statements:

P2562 - Do not get in eyes, on skin or on clothing

WARNING: For Laboratory Research Use Only



**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS:**

Chemical Name: 4-Amino-1-(2-deoxy- $\beta$ -D-*erythro*-pentofuranosyl)-1,3,5-triazin-2(1*H*)-one

Synonyms: 5-aza-CdR, 5-aza-dC, AzadC, 5-Aza-2'-deoxycytidine, AzadC, 5-Azadeoxycytidine, DAC, Dezocitidine, 2'-Deoxy-5-azacytidine, NSC-127716, Dacogen

Hazardous Ingredient: Decitabine, Free Base

CAS Registry Number: 2353-33-5

Molecular Weight: 228.21

Molecular Formula: C<sub>8</sub>H<sub>12</sub>N<sub>4</sub>O<sub>4</sub>

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**SECTION 4. FIRST-AID MEASURES:**

After Inhalation: If inhaled, remove to fresh air; if breathing is difficult, give oxygen; if breathing stops, give artificial respiration

After skin contact: flush with copious amounts of water; remove contaminated clothing and shoes; call a physician

After eye contact: check for and remove contact lenses; flush with copious amounts of water; assure adequate flushing by separating the eyelids with fingers; call a physician

After swallowing: if swallowed, wash out mouth with copious amounts of water; call a physician

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**SECTION 5. FIRE-FIGHTING MEASURES:**

Suitable extinguishing agents: water spray, carbon dioxide, dry chemical powder or foam

Protective equipment: wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes

Unusual fire hazard: may emit toxic fumes under fire conditions such as carbon monoxide, etc.

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**SECTION 6. ACCIDENTAL RELEASE MEASURES:**

Person-related safety precautions: cordon off area of spill; wear self-contained breathing apparatus, protective clothing and heavy rubber gloves

Measures for cleaning/collecting: absorb solutions with finely- powdered liquid-binding material (diatomite, universal binders); decontaminate surfaces and equipment by scrubbing with alcohol; dispose of contaminated material according to Section 13

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**SECTION 7. HANDLING AND STORAGE:**

Information for safe handling: avoid contact with skin, eyes and clothing; material may be an irritant

Storage: store solid and solutions at -20 °C

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## **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION:**

Personal protective equipment as follows:

Breathing equipment: NIOSH/MSHA-approved respirator

Protection of hands: handle with Nitrile rubber gloves with minimum thickness of 0.11 mm (4.3 mil). This recommendation should not be interpreted as offering an approval for any specific use conditions. Please review this recommendation with a safety officer to evaluate if it is appropriate for the anticipated use.

Eye protection: chemical safety goggles

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## **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES:**

Form: crystalline solid; granular or powder

Color: white

Odor: none

Melting point/Melting range: 193-203 °C

Danger of explosion: none

Solubility in / Miscibility with water: soluble in water at 25 mg/mL with warming; buffers, serum, or other additives may increase or decrease the aqueous solubility

Solvent content:

Organic solvents: soluble in DMSO at 90 mg/mL; soluble in ethanol at 2 mg/mL with warming

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## **SECTION 10. STABILITY AND REACTIVITY:**

Stability: avoid acids and bases

Thermal decomposition / conditions to be avoided: protect from light and heat

Dangerous products of decomposition: thermal decomposition may produce toxic gases such as carbon monoxide and carbon dioxide, and nitrogen oxides

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## **SECTION 11. TOXICOLOGICAL INFORMATION:**

RTECS #: XZ3012000

Acute toxicity: intraperitoneal toxicity (LD50): 190 mg/kg (mouse); intravenous toxicity (LD50): 22 mg/kg (mouse)

Primary irritant effect:

On the skin: causes skin irritation; may be harmful if absorbed through the skin

On the eye: causes eye irritation

Inhalation: may cause respiratory tract irritation; may be harmful if inhaled

Ingestion: harmful if swallowed

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## **SECTION 12. ECOLOGICAL INFORMATION:**

General notes: no data available

Treat as potentially toxic if released into the environment

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**SECTION 13. DISPOSAL CONSIDERATIONS:**

Dispose of in accordance with prevailing country, federal, state and local regulations

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**SECTION 14. TRANSPORT INFORMATION:**

DOT:

Proper shipping name: none

Non-Hazardous for transport: this substance is considered to be non-hazardous for transport

IATA class:

Proper shipping name: none

Non-Hazardous for transport: this substance is considered to be non-hazardous for transport

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**SECTION 15. REGULATORY INFORMATION:**

Code letter and hazard designation of product:

Xn: Harmful; Xi: Irritant

EU Risk And Safety phrases:

S22: Do not breathe dust

S24/25: Avoid contact with skin and eyes

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

S28: After contact with skin, wash immediately with plenty of water

S36/37/39: Wear suitable protective clothing, gloves and eye/face protection

S45: In case of accident or if you feel unwell seek medical advice immediately (show the label where possible)

R22: Harmful if swallowed

R61: May cause harm to the unborn child

R62: Possible risk of impaired fertility

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**SECTION 16. OTHER INFORMATION:**

The above information is believed to be correct based on our present knowledge but does not purport to be complete. For research use only by trained personnel. The burden of safe use of this material rests entirely with the user. LC Laboratories disclaims all liability

Reviewed: July 1, 2019