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

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-β-D-erythro-pentofuranosyl)-1,3,5-triazin-2(1H)-one
Hazardous Ingredient: Decitabine, Free Base
CAS Registry Number: 2353-33-5
Molecular Weight: 228.21
Molecular Formula: C$_8$H$_{12}$N$_4$O$_4$

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

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.

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/collection: 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

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 ºC
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

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

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

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

SECTION 12. ECOLOGICAL INFORMATION:
General notes: no data available
Treat as potentially toxic if released into the environment
SECTION 13. DISPOSAL CONSIDERATIONS:
Dispose of in accordance with prevailing country, federal, state and local 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 class:
Proper shipping name: none
Non-Hazardous for transport: this substance is considered to be non-hazardous for transport

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

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