Safety Data Sheet

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

SECTION 1. IDENTIFICATION:

Trade name: Entinostat, Free Base Product Number: <u>E-3866</u> 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: Toxic; Irritant Toxic if swallowed May be harmful if inhaled or absorbed through the skin Causes irritation of the skin and eyes Toxic to aquatic organisms Prolonged exposure may result in serious damage to health May impair fertility and harm unborn child Ingestion may result in anemia, thrombocytopenia (low platelet count), hypophosphatemia (low serum phosphorus), hypoalbuminemia (low serum albumin), hyponatremia (low serum sodium), hypocalcemia (low serum calcium), hypertrialyceridemia (elevated serum trialyceride level), hyperglycemia (elevated serum glucose level), headache, fatigue/lethargy, asthenia (lack of muscle strength), somnolence, weakness/unsteady gait, dyspnea (shortness of breath), nausea, vomiting, anorexia (decreased appetite, diarrhea, and infection Exposure may cause irritation of the 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: *N*-[[4-[[(2-aminophenyl)amino]carbonyl]phenyl]methyl]carbamic acid 3-pyridinylmethyl ester Synonyms: MS-27-275, MS 275-27, MS-275, Histone Deacetylase Inhibitor I, SNDX-275 Hazardous Ingredient: Entinostat, Free Base CAS Registry Number: 209783-80-2 Molecular Weight: 376.41 Molecular Formula: C₂₁H₂₀N₄O₃

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/collecting: absorb solutions with finely- powdered liquidbinding 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 °C

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

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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 to off-white Odor: none Melting point/Melting range: not determined Danger of explosion: none Solubility in / Miscibility with water: very poorly soluble in water; maximum solubility in plain water is estimated to be about 10-20 µM buffers, serum, or other additives may increase or decrease the aqueous solubility Solvent content:

Organic solvents: soluble in DMSO at 25 mg/mL with slight warming; very poorly soluble in ethanol

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 #: EY8572500

Acute toxicity: oral toxicity (LD50): 380-750 mg/kg (mouse); oral toxicity (LD50): 150-200 mg/kg (rat) - toxicity data from the Bayer MSDS dated February 1, 2007 for MS-275 Primary irritant effect: not known

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

On the eye: causes eye irritation

Inhalation: may be an irritant; may be harmful if inhaled

Ingestion: toxic if swallowed; may result in fetal harm and impaired fertility

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:

UN number: 2811 DOT: Toxic solid, organic, n.o.s. (3-Pyridylmethyl *N*-{4-[(2aminophenyl)carbamoyl]benzyl}carbamate) Class: 6.1, Packing group: III IMDG: Toxic solid, organic, n.o.s. (3-Pyridylmethyl *N*-{4-[(2aminophenyl)carbamoyl]benzyl}carbamate) Class: 6.1, Packing group: III IATA: Toxic solid, organic, n.o.s. (3-Pyridylmethyl *N*-{4-[(2aminophenyl)carbamoyl]benzyl}carbamate) Class: 6.1, Packing group: III

SECTION 15. REGULATORY INFORMATION:

Code letter and hazard designation of product: T: Toxic; XI: Irritant EU Risk And Safety phrases: S22: Do not breathe dust S36/37: Wear suitable protective clothing and gloves S45: In case of accident or if you feel unwell, seek medical advice immediately (show label where possible) R25: Toxic if swallowed R36/38: Irritating to eyes and skin R48/25: Toxic: danger of serious damage to health by prolonged exposure 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