Safety Data Sheet

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

SECTION 1. IDENTIFICATION:

Trade name: Bexarotene Product Number: <u>B-2422</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 if swallowed

Irritating to the sking and eyes; may cause respiratory irritation Synthetic retinoid analog that may cause abnormal fetal development

Teratogen in pregnant laboratory animals

Skin exposure may exacerbate the deleterious effects of sunlight, for example, increased risk of sunburn

Ingestion may cause effects similar to hypervitaminosis A including headache, nausea, vomiting, lip inflammation, mucous membrane dryness, joint pain, scaly skin, and hyperlipidemia

Target organs: Skin, respiratory, reproductive, and gastrointestinal systems 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-[1-(3,5,5,8,8-pentamethyl-6,7-dihydronaphthalen-2yl)ethenyl]benzoic acid Synonyms: Targretin, Targretyn, Targrexin, LGD-1069, LG 1069, LG100069, SR-11247, HSDB 7453, D03106, DB00307 Hazardous Ingredient: Bexarotene CAS Registry Number: 153559-49-0 Molecular Weight: 348.48 Molecular Formula: $C_{24}H_{28}O_2$

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 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:

Page 3 of 4 Form: crystalline solid; granular or powder Color: white Odor: none Melting point/Melting range: 215-224 °C Danger of explosion: none Solubility in / Miscibility with water: very poorly soluble in water; maximum solubility in plain water is estimated to be about 10-50 µM; buffers, serum, or other additives may increase or decrease the aqueous solubility Solvent content: none Organic solvents: soluble in DMSO at 65 mg/mL; soluble in ethanol at 10 mg/mL with warming

SECTION 10. STABILITY AND REACTIVITY:

Stability: stable if stored as directed; avoid strong oxidizing agents 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, carbon dioxide, and nitrogen oxides

SECTION 11. TOXICOLOGICAL INFORMATION:

RTECS #: DH6834830

Acute toxicity: oral toxicity (LD50): >1500 mg/kg (rat) - toxicity data from the Apicore MSDS dated July 11, 2011 for Bexarotene; oral toxicity (TDLo): 4.2-72.6 mg/kg (rat), 2800-4200 mg/kg (mouse)

Primary irritant effect:

On the skin: causes skin irritation; exposure may exacerbate the deleterious effects of sunlight

On the eye: causes eye irritation

Inhalation: causes irritation of mucous membranes and upper respiratory tract; may be harmful if inhaled

Ingestion: harmful if swallowed; may cause effects similar to hypervitaminosis A including headache, nausea, vomiting, lip inflammation, mucous membrane dryness, joint pain, scaly skin, and hyperlipidemia

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 EU Risk And Safety phrases: S22: Do not breathe dust S24/25: Avoid contact with skin and eyes S36/37: Wear suitable protective clothing and gloves R22: Harmful if swallowed R36/37/38: Irritating to eyes, respiratory system, and skin

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