Safety Data Sheet

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

SECTION 1. IDENTIFICATION:

Trade name: Ingenol 3-Angelate Product Number: <u>I-5900</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 or inhaled Can cause severe eye damage and skin burns Skin reactions may include erythema (redness), flaking/scaling, crusting, swelling, vesiculation/pustulation (blister/pustule formation), and erosion/ulceration 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: (2*Z*)-(1*aR*,2*S*,5*R*,5*aS*,6*S*,8*aS*,9*R*,10*aR*)-1*a*,2,5,*a*,6,9,10,10*a*-Octahydro-5,5*a*-dihydroxy-4-(hydroxymethyl)-1,1,7,9-tetramethyl-11-oxo-1*H*-2,8*a*-methanocyclopenta[*a*]cyclopropa[*e*]cyclodecen-6-yl ester 2-methyl-2butenoic acid Synonyms: PEP-005, 3-Ingenyl Angelate, Ingenyl 3-Angelate, 3-Angeloyl Ingenol, 3-Angelyl Ingenol, Ingenol Mebutate, Picato Hazardous Ingredient: Ingenol 3-Angelate CAS Registry Number: 75567-37-2 Molecular Weight: 430.53 Molecular Formula: $C_{25}H_{34}O_6$

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: 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

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:

Form: crystalline solid; granular or powder Color: white Odor: none Melting point/Melting range: not determined Danger of explosion: none Solubility in / Miscibility with water: not determined Solvent content: none Organic solvents: soluble in DMSO or 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

SECTION 11. TOXICOLOGICAL INFORMATION:

RTECS #: not available Acute toxicity: Primary irritant effect: On the skin: strongly corrosive; causes severe burns; may cause deep tissue damage; poses risk of sensitization or allergic reaction On the eye: strongly corrosive; causes severe eye damage Inhalation: toxic if inhaled; dust is corrosive and leads to serious dyspnea (shortness of breath) and lung edema Ingestion: toxic if swallowed; strongly corrosive causing severe burning pains in the mouth, throat, and stomach

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: 2928 DOT: Toxic solid, corrosive, organic, n.o.s. (Ingenol Mebutate), Class: 6.1, Packing group: I IMDG: Toxic solid, corrosive, organic, n.o.s. (Ingenol Mebutate), Class: 6.1, Packing group: I IATA: Toxic solid, corrosive, organic, n.o.s. (Ingenol Mebutate), Class: 6.1, Packing group: I Page 4 of 4

SECTION 15. REGULATORY INFORMATION:

Code letter and hazard designation of product:

Hazard-determining components of labeling:

EU Risk And Safety phrases:

S9: Keep container in a well-ventilated place

S20: When using do not eat or drink

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)

R23/25: Toxic by inhalation and 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 for any damage resulting from use of this material.

Reviewed: July 1, 2019