# **Safety Data Sheet**

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

# **SECTION 1. IDENTIFICATION:**

Trade name: Dasatinib Product Number: <u>D-3307</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

Toxic if swallowed

May be harmful if inhaled or absorbed through the skin

Ingestion may cause damage to any/all of the following systems: hematologic, gastrointestinal, central nervous system, musculoskeletal, respiratory, metabolic-nutritional, hepatic, cardiovascular, dermatologic, renal

May damage fertility and/or the unborn child and breastfed infant

Exposure may cause 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: N-(2-Chloro-6-methylphenyl)-2-[[6-[4-(2-hydroxyethyl)-1-

piperazinyl]-2-methyl-4-pyrimidinyl]amino]-5-thiazolecarboxamide

Synonyms: BMS-354825, Sprycel Hazardous Ingredient: Dasatinib CAS Registry Number: 302962-49-8

Molecular Weight: 488.01

Molecular Formula: C<sub>22</sub>H<sub>26</sub>CIN<sub>7</sub>O<sub>2</sub>S

# **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 and 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: emits toxic fumes 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 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 °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: off-white to pale yellow

Odor: none

Melting point/Melting range: 261-285 °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  $\mu$ M; buffers, serum, or other

additives may increase or decrease the aqueous solubility

Solvent content: none

Organic solvents: soluble in DMSO at 200 mg/mL; very poorly soluble in ethanol

# **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 #: XI3466000

Acute toxicity: oral toxicity (LD50): 50-100 mg/kg (rat), 24-45 mg/kg (monkey) - toxicity data from the Bristol-Myers Squibb MSDS dated May 15, 2013 for Dasatinib

Primary irritant effect:

On the skin: may be an irritant; may be harmful if absorbed through the skin

On the eye: may be an irritant

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

Ingestion: toxic if swallowed

# **SECTION 12. ECOLOGICAL INFORMATION:**

General notes: Very toxic to aquatic organisms

Releases to the environment should be avoided

Acute Toxicity to Fish - toxicity data from the Bristol-Myers Squibb MSDS dated May 15, 2013 for Dasatinib

LC50 (*Oncorhynchus mykiss* (rainbow trout), 96 H) : > 0.50 mg a.i./L. (limit of solubility)

NOEC (*Oncorhynchus mykiss* (rainbow trout), 96 H) : 0.50 mg a.i./L. (limit of solubility)

Toxicity to aquatic plants

EC50 (*Pseudokirchneriella subcapitata* (formerly *Selenastrum capricornutum*), Algae biomass, 72 H) : 0.14 mg/l

NOEC (*Pseudokirchneriella subcapitata* (formerly *Selenastrum capricornutum*), Algae biomass, 72 H): 0.03 mg/l

EC50 (*Pseudokirchneriella subcapitata* (formerly *Selenastrum capricornutum*), Algae growth rate, 72 H) : > 0.18 mg/l (limit of solubility)

NOEC (Pseudokirchneriella subcapitata (formerly Selenastrum capricornutum),

Algae growth rate, 72 H): 0.073 mg/l

Toxicity to microorganisms

Page 4 of 5

Respiration inhibition, EC50 (Activated Sludge, 3 H): > 1,000 mg/l

Chronic toxicity to fish

Early-life Stage LOEC (Pimephales promelas (fathead minnow)): 0.018 mg/l

NOEC: 0.034 mg/l

Chronic toxicity to aquatic invertabrates

LOEC (Daphnia magna (Water flea), 21 D): 0.17 mg/l (limit of solubility) NOEC

(Daphnia magna (Water flea), 21 D): 0.068 mg/l

# **SECTION 13. DISPOSAL CONSIDERATIONS:**

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

# **SECTION 14. TRANSPORT INFORMATION:**

UN number: 3077

DOT: Environmentally hazardous substance, solid, n.o.s. (Dasatinib),

Class: 9, Packing group: III

IMDG: Environmentally hazardous substance, solid, n.o.s. (Dasatinib),

Class: 9, Packing group: III

IATA: Environmentally hazardous substance, solid, n.o.s. (Dasatinib),

Class: 9, Packing group: IIII

# **SECTION 15. REGULATORY INFORMATION:**

Code letter and hazard designation of product:

T: Toxic; N: Dangerous to the environment

EU Risk And Safety phrases:

S22: Do not breathe dust

S29: Do not empty into drains

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

S38: In case of insufficient ventilation, wear suitable respiratory equipment

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

S53: Avoid exposure - obtain special instructions before use

R25: Toxic if swallowed

R40: Limited evidence of a carcinogenic effect

R48/25: Toxic: danger of serious damage to health by prolonged exposure if swallowed

R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

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

Page 5 of 5 trained personnel. The burden of safe use of this material rests entirely with the user. LC Laboratories disclaims all liability

Reviewed: July 1, 2019