

## Lapatinib, Free Base

**Catalog Number: orb61053**

### **Material Safety Data Sheet**

#### **SECTION 1: PRODUCT AND COMPANY IDENTIFICATION**

##### **Product identifier**

Product name: Lapatinib, Free Base

Catalog No.: orb61053

##### **Details of the supplier of the safety data sheet**

Company: Biorbyt Ltd.

Tel: +44 (0)1223 859 353

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#### **SECTION 2. HAZARD(S) IDENTIFICATION:**

Hazard Description: pharmaceutically active substance

May be harmful if swallowed, inhaled, or absorbed through the skin

May be harmful to unborn child

Ingestion may result in diarrhea, nausea, vomiting, abdominal cramping, rash, fatigue, palmar-plantar erythrodysesthesia syndrome (also known as hand-foot syndrome manifested as redness, tenderness, peeling, blistering and ulceration of the palms and soles), hepatotoxicity, interstitial lung disease, pneumonitis, and prolonged QT interval (heart rhythm disorder)

Exposure may cause irritation to eyes, skin, mucous membranes, and upper respiratory tract

Signal Word: Warning

##### **GHS Hazard Statements:**

H302 - Harmful if swallowed

H313 - May be harmful in contact with skin

H333 - May be harmful if inhaled

H335 - May cause respiratory irritation

H360 - May damage fertility or the unborn child

##### **GHS Precautionary Statements:**

P260 - Do not breathe dust/fume/gas/mist/vapours/spray

P264 - Wash any exposed skin thoroughly after handling

P280 - Wear protective gloves/eye protection/face protection

P314 - Get medical advice/attention if you feel unwell

P501 - Dispose of contents/container in accordance with local/regional/national/international regulations



**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS:**

Chemical Name: *N*-[3-Chloro-4-[(3-fluorophenyl)methoxy]phenyl]-6-[5-[[[2-

(methylsulfonyl)ethyl]amino]methyl]-2-furanyl]-4-quinazolinamine

Synonyms: GSK 572016, GW-572016, GW 572016X, Tykerb, Tyverb

Hazardous Ingredient: Lapatinib, Free Base

CAS Registry Number: 231277-92-2

Molecular Weight: 581.06

Molecular Formula: C<sub>29</sub>H<sub>26</sub>ClFN<sub>4</sub>O<sub>4</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; 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 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: chemical-resistant rubber gloves

Eye protection: chemical safety goggles

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES:**

Form: crystalline solid; granular or powder

Color: pale-yellow

Odor: none

Melting point/Melting range: 137-150 °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 1-10 µM; buffers, serum, or other additives may increase or decrease the aqueous solubility

Solvent content:

Organic solvents: soluble in DMSO at 200 mg/mL; 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 #: RTECS #: VA0952500

Acute toxicity: oral toxicity (TDLo): 1198.4 mg/kg (human)

Primary irritant effect: none known

On the skin: none known; may be an irritant

On the eye: not known; may be an irritant

Inhalation: not known; may be an irritant

Ingestion: may result in adverse gastrointestinal effects

**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:

Hazard-determining components of labeling:

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

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