

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name Lapatinib
Product Number 12121
Identified Uses For Research Use Only (RUO). Not intended for use in humans or animals. Not intended for therapeutic or diagnostic procedures.

Manufacturer/Supplier Cell Signaling Technology, Inc.
 3 Trask Lane
 Danvers, MA 01923 USA
Phone #: 1-978-867-2300
Emergency Tel# 1-978-578-6737

2. HAZARDS IDENTIFICATION
Emergency Overview

OSHA Hazards
 No known OSHA hazards.

GHS Classification
 Not a dangerous substance according to GHS.

Physical State
 Solid

Potential Health Effects
Acute Toxicity

Eyes	Risk of serious eye damage.
Skin	May be harmful if absorbed through skin. May cause skin irritation.
Inhalation	May be harmful if inhaled. May cause respiratory tract irritation
Ingestion	Harmful if swallowed.

3. COMPOSITION/INFORMATION ON INGREDIENTS

No ingredients are hazardous according to OSHA, GHS criteria.

Chemical Name	CAS No.	Concentration
N-[3-chloro-4-[93-fluorophenyl]methoxy]phenyl]-6-[5-[92-methylsulfonyl]ethylamino]methyl]furan-2-yl]quinazolin-4-amine ditosylate	388082-78-8	-

Synonym: Lapatinib, Ditosylate, Tykerb, GW-572016, Tyverb

Formula: C₂₉H₂₆ClFN₄O₄S-2C₇H₈O₃S

Molecular Weight: 383.82 g/mol

4. FIRST AID MEASURES

Eye Contact Rinse immediately with plenty of water for at least 15 minutes. Get medical attention.
Skin Contact Rinse immediately with soap and plenty of water. Get medical attention immediately.
Inhalation Move to fresh air. Get medical attention.
Ingestion Never give anything by mouth to an unconscious person. Rinse mouth with water.
Notes to physician Treat symptomatically.

5. FIRE FIGHTING MEASURES

Flash Point See Section 9. Physical and Chemical Properties

Suitable Extinguishing Media	Use dry chemical, water spray, alcohol resistant foam or carbon dioxide.
Special exposure hazards	Hazardous decomposition products formed under fire conditions –toxic gases can be evolved.
Special protection for fire fighters	Wear self-contained breathing apparatus and protective unit
Other information	No data available

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Avoid contact with skin, eyes, clothing. Avoid creating dusts during clean up.
Environmental precautions	Prevent product from entering drains. Prevent further spillage if safe to do so.

7. HANDLING AND STORAGE

Safe handling advice	Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice.
Storage conditions	Keep container tightly closed in cool dry place.
Incompatibilities	No data available
Specific end uses	No data available

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits
 This product contains no substances with established exposure limit values.

Engineering Measures
 Emergency eyewash and safety shower. Mechanical exhaust required.

Hygiene Measures
 Do not eat, drink or smoke when handling product. Wear suitable gloves and eye/face protection. Wash hands thoroughly after handling product. Regular cleaning of equipment, work area and clothing is recommended. Wash contaminated clothing before reuse.

Personal Protective Equipment
Respiratory Protection
 In case of insufficient ventilation wear suitable respiratory protective equipment tested and approved under appropriate government standards such as NIOSH, CEN)

Eye Protection:
 Safety glasses tested and approved under appropriate government standards such as NIOSH

Skin and body protection:
 Wear suitable protective clothing, protective shoes or boots.

Hand protection:
 Wear compatible chemical resistant gloves. Dispose of gloves in accordance with applicable laws and good laboratory practices.

9. PHYSICAL AND CHEMICAL PROPERTIES
Information on basic physical and chemical properties

Physical State	solid
Color	yellow
Odor	none
pH	no data available
Melting point range	241- 252°C
Boiling point	no data available
Evaporation rate	no data available
Flash point	no data available
Autoignition temperature	no data available
Flammability limits in air	no data available
Explosive properties	no data available
VOC content	no data available
Decomposition temperature	no data available
Solubility	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
Organic Solvents:	Soluble in DMSO at 200mg/mL; very poorly soluble in ethanol

10. STABILITY AND REACTIVITY

Stability	Stable under normal conditions.
Conditions/Materials to avoid	No data available
Hazardous decomposition products	No data available

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

To the best of our knowledge, the chemical, physical and toxicological properties have not been fully investigated.

Routes of Exposure**Potential Health Effects****Acute Toxicity**

Eyes	No information available
Skin	No information available
Inhalation	No information available
Ingestion	No information available

Target organ effects No information available

Chronic Effects

Carcinogenic effects	No information available
Mutagenic effects	No information available
Reproductive toxicity	No information available
Teratogenic effects	No information available
Sensitization	No information available

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12. ECOLOGICAL INFORMATION

Ecotoxicity	No data available
Persistence and degradability	No data available
Bioaccumulation	No data available
Mobility	No data available

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods Dispose of in accordance with all applicable environmental laws and regulations.

14. TRANSPORT INFORMATION

IATA	Not regulated
DOT	Not regulated
IMDG	Not regulated

15. REGULATORY INFORMATION

OSHA Hazards

No known OSHA hazards

GHS Classification

Not a dangerous substance according to GHS.

U.S. Federal Regulations**SARA 302**

No chemicals in this material are subject to reporting requirements established by SARA Title III, Section 302

SARA 311/312

No SARA hazards

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals that exceed the reporting levels of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain any substances regulated as hazardous air pollutants (HAPs) under Section 112 of the Clean Air Act Amendments of 1990.

U.S. State Regulations

Massachusetts Right-to-Know Components: -
New Jersey Right-to-Know Components: -
Pennsylvania Right-to-Know Components: -

California Proposition 65

This product does not contain chemicals known to the State of California to cause birth defects or other reproductive harm.

WHMIS Hazard Class

Not controlled.

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

16. OTHER INFORMATION

Revision date 2012-12-20

Disclaimer

The information provided on this material safety data sheet is to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Material Safety Data Sheet