

Safety Data Sheet per OSHA HazCom 2012

	Reviewed on 03/12/2012
1 Identification Product identifier Product name: Lapatinib ditosylate	
Stock number: J62401 CAS Number: 388082-78-8 Relevant identified uses of the substance or mixture and uses advised against. Identified use: SU24 Scientific research and development	
Details of the supplier of the safety data sheet Manufacturer/Supplier: Alfa Aesar Thermo Fisher Scientific Chemicals, Inc. 30 Bond Street Ward Hill, MA 01835-8099 Tel: 800-322-4757 Fax: 800-322-4757 Email: tech@alfa.com www.alfa.com www.alfa.com Unformation Department: Health, Safety and Environmental Department Emergency telephone number: During normal business hours (Monday-Friday, 8am-7pm EST), call (800) 343-0660. After normal business hours, call Carechem 24 a	at (866) 928-0789.
2 Hazard(s) identification Classification of the substance or mixture in accordance with 29 CFR 1910 (OSHA HCS) The substance is not classified according to the Globally Harmonized System (GHS). Hazards not otherwise classified No information known.	
Label elements GHS label elements Not applicable Hazard pictograms Not applicable Signal word Not applicable Hazard statements Not applicable WHMIS classification Not controlled Classification system HMIS ratings (scale 0-4) (Hazardous Materials Identification System) PEALTR 1 Health (acute effects) = 1	
FIRE Image: Constraint of the second sec	
3 Composition/information on ingredients Chemical characterization: Substances CAS# Description: 388082-78-8 Lapatinib ditosylate	
 4 First-aid measures Description of first aid measures After inhalation Supply fresh air. If required, provide artificial respiration. Keep patient warm. Seek immediate medical advice. After skin contact Immediately wash with water and soap and rinse thoroughly. Seek immediate medical advice. After eye contact Rinse opened eye for several minutes under running water. Then consult a doctor. After swallowing Seek medical treatment. Information for doctor Most important symptoms and effects, both acute and delayed No further relevant information available. Indication of any immediate medical attention and special treatment needed No further relevant information available. 	
5 Fire-fighting measures Extinguishing media Suitable extinguishing agents Carbon dioxide, extinguishing powder or water spray. Fight larger fires with water spray or alcohol res Special hazards arising from the substance or mixture If this product is involved in a fire, the following can be released: Carbon monoxide and carbon dioxide Sulfur oxides (SOX) Hydrogen fluoride (HF) Nitrogen oxides (NOX) Hydrogen cyanide (HCN) Possibly Hydrogen cyanide (HCN) Advice for firefighters Protective equipment: Wear self-contained respirator. Wear fully protective impervious suit.	sistant foam.
6 Accidental release measures Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation Ensure adequate ventilation Environmental processions of allow material to be released to the environment without proper governmental permits	
Environmental precautions: Do not allow material to be released to the environment without proper governmental permits. Methods and material for containment and cleaning up: Pick up mechanically.	(Contd. on page 2)

Product name: Lapatinib ditosylate				
		(Contd. of page 1)		
Prevention of secondary hazards: No special measures required. Reference to other sections				
See Section 7 for information on safe handling See Section 8 for information on personal protection equipment.				
See Section 13 for disposal information.				
7 Handling and storage Handling				
Handling Precautions for safe handling Keep container tightly sealed. Information about protection against explosions and fires: No information known.				
Conditions for safe storage, including any incompatibilities				
Storage Requirements to be met by storerooms and receptacles: Store in freezer (-20 °C). Information about storage in one common storage facility:				
Protect from heat				
Store away from oxidizing agents. Further information about storage conditions: Keep container tightly sealed. Specific end use(s) No further relevant information available.				
8 Exposure controls/personal protection				
Additional information about design of technical systems: Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.				
Control parameters Components with limit values that require monitoring at the workplace:				
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace. Additional information: No data				
Exposure controls Personal protective equipment				
General protective and hygienic mea The usual precautionary measures for h Keep away from foodstuffs, beverages.	nsures handling chemicals should be followed. and fast			
Keep away from foodstuffs, beverages Remove all soiled and contaminated clo Wash hands before breaks and at the e	anu reed. Shing immediately. Jord of work			
Maintain an ergonomically appropriate v	nd of work. working environment. spirator when high concentrations are present.			
Protection of hands: Impervious gloves	סטיישנטי איוטיו וווערו טטוטפווגומנוטווט מוב טופטפווג.			
Check protective gloves prior to each use for their proper condition.				
The selection of suitable gloves not only depends on the material, but also on quality. Quality will vary from manufacturer to manufacturer. Penetration time of glove material (in minutes) Not determined Eye protection : Safety glasses				
Eye protection: Safety glasses Body protection: Protective work cloth	ning.			
9 Physical and chemical properties Information on basic physical and ch				
General Information General Information Appearance:				
Form: Color:	Powder Yellow			
Odor: Odor threshold:	Not determined Not determined.			
pH-value:	Not applicable.			
Change in condition Melting point/Melting range:	245-249 °C (473-480 °F)			
Boiling point/Boiling range: Sublimation temperature / start:	Not determined			
Flammability (solid, gaseous) Ignition temperature:	Not determined. Not determined			
Decomposition temperature: Auto igniting:	Not determined Not determined.			
Danger of explosion: Explosion limits:	Not determined.			
Lower: Upper:	Not determined Not determined			
Vapor pressure: Density:	Not applicable. Not determined			
Relative density Vapor density	Not determined. Not applicable.			
Evaporation rate Solubility in / Miscibility with	Not applicable.			
Water: Not determined Partition coefficient (n-octanol/water): Not determined.				
Viscosity: dynamic: kinomatic:	Not applicable.			
kinematic: Other information	Not applicable. No further relevant information available.			
10 Stability and reactivity				

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Reactivity No information known. Chemical stability Stable under recommended storage conditions. Thermal decomposition / conditions to be avoided: Decomposition will not occur if used and stored according to specifications. Possibility of hazardous reactions Reacts with strong oxidizing agents Conditions to avoid No further relevant information available. Incompatible materials: Oxidizing agents Heat

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Product name: Lapatinib ditosylate

Hazardous decomposition products: Carbon monoxide and carbon dioxide Sulfur oxides (SOx) Hydrogen fluoride Nitrogen oxides Hydrogen chloride (HCl) Possibly Hydrogen cyanide (HCN)

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11 Toxicological information			
Information on toxicological effects Acute toxicity: No effects known. LD/LC50 values that are relevant for classification: No data Skin irritation or corrosion: May cause irritation Eye irritation or corrosion: May cause irritation Sensitization: No sensitizing effects known. Germ cell mutagenicity: No effects known. Carcinogenicity: No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH. Reproductive toxicity: No effects known. Specific target organ system toxicity - repeated exposure: No effects known. Specific target organ system toxicity - single exposure: No effects known. Aspiration hazard: No effects known. Subacute to chronic toxicity: No effects known. Additional toxicological information: To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.			
12 Ecological information			
T2 Ecological information Toxicity Aquatic toxicity: No further relevant information available. Persistence and degradability No further relevant information available. Bioaccumulative potential No further relevant information available. Mobility in soil No further relevant information available. Additional ecological information: General notes: Do not allow material to be released to the environment without proper governmental permits. Do not allow undiluted product or large quantities to reach ground water, water course or sewage system. Avoid transfer into the environment. Results of PBT and vPvB assessment PBT: Not applicable. VPVB: Not applicable. Other adverse effects No further relevant information available.			
13 Disposal considerations			
Waste treatment methods Recommendation Consult state, local or national regulations to ensure proper disposal. Uncleaned packagings: Recommendation: Disposal must be made according to official regulations.			
14 Transport information			
UN-Number			
DOT, ADN, IMDG, IATA	Not applicable		
UN proper shipping name DOT, ADN, IMDG, IATA	Not applicable		
Transport hazard class(es)			
DOT, ADR, ADN, IMDG, IATA			
Class	Not applicable		
Packing group DOT, IMDG, IATA	Not applicable		
Environmental hazards:	Not applicable.		
Special precautions for user	Not applicable.		
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.			
Transport/Additional information:			
DOT			
Marine Pollutant (DOT): UN "Model Regulation":	No		
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15 Regulatory information

 Regulatory information

 Safety, health and environmental regulations/legislation specific for the substance or mixture

 GHS label elements Not applicable

 Hazard pictograms Not applicable

 Hazard statements Not applicable

 Hazard statements Not applicable

 Mational regulations

 This product is not listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical Substance Inventory. Use of this product is restricted to research and development only. This product must be used by or directly under the supervision of a technically qualified individual as defined by TSCA. This product is not listed on the Canadian Domestic Substances List (DSL) or the Canadian Non-Domestic Substances List (NDSL).

 SARA Section 313 (specific toxic chemical listings) Substance is not listed.

 Prop 65 - Chemicals known to cause cancer Substance is not listed.

 Prop 65 - Developmental toxicity, female Substance is not listed.

 Prop 65 - Developmental toxicity, male Substance is not listed.

 Prop 65 - Developmental toxicity, male Substance is not listed.

 Prop 65 - Developmental toxicity, male Substance is not listed.

 Prop 65 - Developmental toxicity, male Substance is not listed.

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 Prop 65 - Developmental tox

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Product name: Lapatinib ditosylate

Other regulations, limitations and prohibitive regulations Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No. 1907/2006. Substance is not listed. The conditions of restrictions according to Article 67 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the market and use must be observed. Substance is not listed. Annex XIV of the REACH Regulations (requiring Authorisation for use) Substance is not listed. Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

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Department issuing SDS: Global Marketing Department
Date of preparation / last revision 11/24/2015 / Abbreviations and acronyms:
RID: Reglement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ADR: Accord européen sur le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
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LCSO: Lethal concentration, 50 percent
VPUB: very Persistent and very Bioaccumulative
ACGIH: American Conterence of Governmental Industrial Hygienists (USA)
(SHA: Occupational Safety and Health Administration (USA)
NTP: National Toxicology Program (USA)
(JARC: International Agency for Research on Cancer
EPA: Environmental Protection Agency (USA)

USA