

Bortezomib: sc-217785



The Power to Question

MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Bortezomib
Product Number: sc-217785
Supplier: Santa Cruz Biotechnology, Inc.
2145 Delaware Avenue
Santa Cruz, CA 95060
800.457.3801 or 831.457.3800
Emergency: ChemWatch
Within the US & Canada: 877-715-9305
Outside the US & Canada: +800 2436 2255 (1-800-CHEMCALL) or call +613 9573 3112

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Acute Toxicity - Oral (Category 2)

Acute Toxicity - Dermal (Category 2)

Acute Toxicity - Inhalation (Category 2)

Single Target Organ Toxicity - Repeat Exposure (Category 1)

Classification according to Directive 67/548/EEC or Directive 1999/45/EC

Toxic

Information concerning particular hazards for human and environment: Not applicable

Hazards not otherwise classified: No information known.

Label elements

Labeling according to Regulation (EC) No 1272/2008

The substance is classified and labeled according to the CLP regulation.

Pictograms



Signal Words

Danger

Hazard statements

H300+H310+H330

Fatal if swallowed, in contact with skin or if inhaled.

H372

Causes damage to the liver and the immune system through prolonged or repeated exposure. Route of exposure: Oral.

Precautionary statements

P260

Do not breathe dust/fume/gas/mist/vapors/spray.

P284

Wear respiratory protection.

P320

Specific treatment is urgent (see on this label).

P361

Remove/Take off immediately all contaminated clothing.

P405

Store locked up.

P501

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

Labeling according to Directive 67/548/EEC or Directive 1999/45/EC

Pictograms



Hazard Codes

T

R-Phrase(s)

R23/24/25-48/23/24/25: Toxic by inhalation, in contact with skin and if swallowed. Toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.

Information concerning particular hazards for human and environment: Not applicable

Hazards not otherwise classified No information known

WHMIS classification

D1A Very toxic material causing immediate and serious toxic effects

D2A Very toxic material causing other toxic effects

**Classification system****HMIS Rating**

Health 3

Flammability 1

Reactivity 1

Other hazards**Results of PBT and vPvB assessment**

PBT: Not applicable.

vPvB: Not applicable.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula: C₁₉H₂₅BN₄O₄

Molecular Weight: 384.24

CAS-No.: 179324-69-7

4. FIRST AID MEASURES**Description of first aid measures****General Information**

Immediately remove any clothing soiled by the product. Remove breathing apparatus only after contaminated clothing has been completely removed. In case of irregular breathing or respiratory arrest provide artificial respiration.

If inhaled

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Seek immediate medical advice.

In case of skin contact

Immediately wash with water and soap and rinse thoroughly. Seek immediate medical advice.

In case of eye contact

Rinse opened eye for several minutes under running water. Then consult a doctor.

If swallowed

Do not induce vomiting. Immediately call for medical help.

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. FIREFIGHTING MEASURES**Extinguishing media****Suitable extinguishing agents**

Carbon dioxide, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Special hazards arising from the substance or mixture

In case of fire, the following can be released: Carbon monoxide and carbon dioxide, Nitrogen oxides (NO_x), Boron oxide

Advice for firefighters

Protective equipment: Wear self-contained respirator. Wear fully protective impervious suit.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation.

Environmental precautions:

Do not allow product to reach sewage system or any water course. Do not allow to penetrate the ground/soil.

Methods and material for containment and cleaning up

Dispose contaminated material as waste according to item 13. Ensure adequate ventilation.

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

Precautions for safe handling

Keep container tightly sealed. Ensure good ventilation at the workplace. Open and handle container with care.

Information about protection against explosions and fires

No information known.

Conditions for safe storage, including any incompatibilities

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.

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 measures

The usual precautionary measures for handling chemicals should be followed. Keep away from foodstuffs, beverages and feed. Remove all soiled and contaminated clothing immediately. Wash hands before breaks and at the end of work. Store protective clothing separately. Avoid contact with the eyes and skin. Maintain an ergonomically appropriate working environment.

Respiratory protection

Use self-contained respiratory protective device in emergency situations

Skin protection

Impervious gloves. 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.

Eye protection

Safety glasses

Body protection

Protective work clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form	Powder	Odor	Not determined
Odor threshold	Not determined	pH-value	Not determined
Melting point/range	139-143 °C	Boiling point/range	Not determined
Sublimation temperature / start	Not determined	Flash point	Not determined

Flammability (solid, gaseous)	Not applicable.	Ignition temperature	Not determined
Decomposition temperature	Not determined	Auto igniting	Not determined
Danger of explosion	None	Lower explosion limits	Not determined
Upper explosion limits	Not determined	Vapor pressure	Not determined
Density (20°C)	Not determined	Relative density	Not determined
Vapor density	Not determined	Evaporation rate	Not determined
Solubility in Water	Not miscible	Dynamic Viscosity	Not determined
Kinematic Viscosity	Not determined	Partition coefficient (n-octanol/water)	Not determined

10. STABILITY AND REACTIVITY

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

Incompatible materials

Oxidizing agents, heat.

Hazardous decomposition products

Carbon monoxide and carbon dioxide, nitrogen oxides, boron oxide.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Fatal if inhaled.

Fatal in contact with skin.

Fatal if swallowed.

Danger through skin absorption.

The Registry of Toxic Effects of Chemical Substances (RTECS) contains acute toxicity data for this substance.

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

Causes damage to the liver and the immune system through prolonged or repeated exposure. Route of exposure: Oral.

Specific target organ system toxicity - single exposure

No effects known.

Aspiration hazard

No effects known.

Subacute to chronic toxicity

The Registry of Toxic Effects of Chemical Substances (RTECS) contains multiple dose toxicity data for this substance.

Additional toxicological information

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

Carcinogenic categories

OSHA-Ca (Occupational Safety & Health Administration) Substance is not listed.

12. ECOLOGICAL INFORMATION

Aquatic Toxicity

no data available

Bioaccumulative potential

no data available

General notes

Do not allow product to reach ground water, water course or sewage system. Danger to drinking water if even small quantities leak into the ground. Avoid transfer into the environment.

Persistence and degradability

no data available

Mobility in soil

no data available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Consult state, local or national regulations to ensure proper disposal.

Uncleaned packagings

Disposal must be made according to official regulations.

14. TRANSPORT INFORMATION

DOT (US)

UN number: 3249 Class: 6.1 Packing group: II

Proper shipping name: Medicine, solid, toxic, n.o.s.

Reportable Quantity (RQ): 1621 lbs

Marine pollutant: No

Poison Inhalation Hazard: No

UN "Model Regulation": UN3249, Medicine, solid, toxic, n.o.s. (Bortezomib), 6.1, II

IMDG

UN number: 3249 Class: 6.1 Packing group: II EMS-No: F-A, S-A

Proper shipping name: MEDICINE, SOLID, TOXIC, N.O.S.

Marine pollutant: No

IATA

UN number: 3249 Class: 6.1 Packing group: II

Proper shipping name: MEDICINE, SOLID, TOXIC, N.O.S.

Environmental hazards:

Not applicable.

Special precautions for user Warning

Toxic substances

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.

15. REGULATORY INFORMATION

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

National 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 must not be used for commercial purposes or in formulations for commercial purposes.

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.

California Proposition 65

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

Prop 65 - Developmental toxicity Substance is not listed.

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

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

Information about limitation of use

For use only by technically qualified individuals.

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.

REACH

Pre-registered substances Substance is listed.

Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

16. OTHER INFORMATION

The above information is believed to be correct but does not purport to be complete and should be used only as a guide. The burden of safe use of this material rests entirely with the user.

9/3/2014