

Date: 9/01/2022

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND THE COMPANY

1.1 Product identifiers

Product Name : **Bortezomib**Product Number : AUR10831

Manufacturer : Aurora Medbiochem

Address: : 938 South Andreasen Drive, Suite E

Escondido, CA 92029 USA

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances

1.3 Emergency telephone

Emergency Phone # : +1-760-738-1508 Fax Phone # :+1-760-738-1530

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

Product/ Chemical Name	Description	Safety Information
Bortezomib	Off white solid	See below

SECTION 3: HAZARDS IDENTIFACTION

Components	CAS Number	EC-No.	Molecular Weight	Chemical Formula
Bortezomib	179324-69-7		384.24	C ₁₉ H ₂₅ BN ₄ O ₄

Emergency Overview:

OSHA Hazards: Irritant, Very toxic by ingestion, Very toxic by absorption, Very toxic by inhalation, Target organ effect, Reproductive hazard

Target Organs: Gastrointestinal tract, Liver, Reproductive system, Eyes, Skin, Blood,

Kidney

GHS Classification: Acute toxicity, Oral (Category 2)

Acute toxicity, Inhalation (Category 2)
Acute toxicity, Dermal (Category 2)

Skin irritation (Category 2A) Eye irritation (Category 2)

Reproductive toxicity (Category 1B)

GHS Label elements, including precautionary statements

Pictogram:



Date: 9/01/2022

Signal word: Danger

GHS Hazard statement(s): H300 Fatal if swallowed.

H310 Fatal in contact with skin. H315 Causes skin irritation.

H319 Causes serious eye irritation.

H330 Fatal if inhaled.

H360 May damage fertility or the unborn child.

GHS Precautionary statement(s): P260 Do not breathe

dust/fumes/gas/mist/vapors/spray.

P263 Avoid contact during pregnancy/while nursing.

P270 Do not eat, drink or smoke when using this product.

P272 Contaminated work clothing should not be allowed out of the workplace.

P281 Use personal protective equipment as required.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position

comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if

present and easy to do. Continue rinsing.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P330 Rinse mouth.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P337+P313 If eye irritation persists: Get medical advice/attention.

P361 Remove/take off immediately all contaminated clothing.

P363 Wash contaminated clothing before reuse.

P405 Store locked up.

HMIS Classification

Health hazard: 4

Chronic Health Hazard: *

Flammability: 1

Physical hazards: 0

NFPA Rating

Health Hazard: 4

Fire: 01

Reactivity Hazard: 0

Potential Health Effects

Inhalation: May be fatal if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.

Skin: May be harmful if absorbed through skin. May cause skin irritation.

Eyes: May cause eye irritation.

Ingestion: May be harmful if swallowed

Date: 9/01/2022

SECTION 4: FIRST AID MEASURES

4.1 Description of first-aid measures

General advice

Show this material safety data sheet to the doctor in attendance.

If inhaled: If breathed in, move person into fresh air. If not breathing, give artificial respiration.

In case of skin contact: Wash off with soap and plenty of water.

In case of eye contact: Flush eyes with water as a precaution.

If swallowed: Never give anything by mouth to an unconscious person. Rinse mouth with water.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 11)

4.3 Indication of any immediate medical attention and special treatment needed No data available.

SECTION 5: FIREFIGHTING MEASURE

Condition of flammability: Not flammable or combustible.

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products formed under fire conditions— carbon oxides, nitrogen oxides.

5.3 Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

5.4 Further information

Remove container from danger zone and cool with water. Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions: Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition.

Evacuate the danger area, observe emergency procedures, consult an expert.

Environmental precautions: Do not let product enter drains.

Methods for cleaning up: Sweep up and shovel. Keep in suitable, closed containers for disposal

SECTION 7:HANDLING AND STORAGE

Date: 9/01/2022

7.1 Precautions for safe handling

Advice on safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

Advice on protection against fire and explosion

Keep away from open flames, hot surfaces, and sources of ignition. precautionary measures against static discharge.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Keep container tightly closed in a dry and well-ventilated place.

Recommended storage temperature: -20 °C

SECTION 8: EXPOSURE CONTROLS/ PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

Personal protective equipment

Respiratory protection:

Respiratory protection is not required. Where protection is desired, use multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection:

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye protection:

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Skin and body protection:

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific workplace. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures: General industrial hygiene practice.

Control of environmental exposure

Do not let product enter drains.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Property	BORTEZOMIB
Appearance:	White to off white solid
pH:	No data available



Date: 9/01/2022

Water Solubility:	No data available	
Other Solubility:	DMSO (200 mg/ml), EtOH (200 mg/ml)	
Boiling Point (°C):	No data available	
Melting Point (°C):	No data available	
Flash Point (°C):	No data available	
Ignition Temperature (°C):	No data available	
Density:	No data available	

SECTION 10: STABILITY AND REACTIVITY

Property	BORTEZOMIB	
Chemical stability	Stable under recommended storage	
	conditions	
Conditions to avoid:	Light, moisture	
Materials to avoid:	strong oxidizing agents, strong bases	
Hazardous decomposition products:	Carbon oxides, nitrogen oxides	

SECTION 11: TOXICOLOGICAL INFORMATION

BORTEZOMIB

Acute toxicity: no data available

Skin corrosion/irritation: no data available

Serious eye damage/eye irritation: no data available **Respiratory or skin sensitization:** no data available

Germ cell mutagenicity: no data available

Carcinogenicity:

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Bortezomib) **ACGIH:** No component of this product present at levels greater than or equal to 0.1%

is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1%

is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1%

is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: Resulted in impaired fertility in animal studies. Developmental studies in rats and rabbits resulted in embryo/fetal death only at maternally toxic dosages, but no direct toxicity to the embryo/fetus.

Teratogenicity: no data available **Aspiration hazard:** no data available

Potential Health Effects

Inhalation: Very toxic if inhaled. May cause respiratory tract irritation.

Skin: Very toxic if absorbed through skin. Causes skin irritation.

Eyes: Causes eye irritation.

Ingestion: Very toxic if swallowed.

Signs and Symptoms of Exposure: Prolonged or repeated exposure may cause fatigue

and fever, and effects on the hematological

(decreases in hemoglobin/anemia, blood counts and platelets), gastrointestinal (nausea,

diarrhea, vomiting, abdominal pain), and nervous



Date: 9/01/2022

system (headache, peripheral neuropathy). May affect fertility and fetal development.

Synergistic effects: no data available

Additional information: RTECS: not available

SECTION 12: ECOLOGICAL INFORMATION

BORTEZOMIB:

Toxicity: no data available

Persistence and degradability: no data available **Bioaccumulative potential:** no data available

Mobility in soil: no data available

PBT and vPvB assessment: no data available **Other adverse effects:** no data available

SECTION 13: DISPOSAL CONSIDERATION

Product: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging: Dispose of as unused

product.

SECTION 14: TRANSPORT INFORMATION

DOT (US): UN-number: 2811, Class: 6.1, Packing group: II; Proper shipping name: Toxic solids, organic, n.o.s. (Bortwzomib); Marine pollutant: No; Poison inhalation hazard: No **IMDG:** UN-number: 2811, Class: 6.1, Packing group: II; EMS-No: F-A, S-A; Proper shipping

name: TOXIC SOLID, ORGANIC, N.O.S. (Bortezomib); Marine pollutant: No

IATA: UN-number: 2811, Class: 6.1, Packing group: II; Proper shipping name: Toxic solid,

organic, n.o.s. (Bortezomib)

SECTION 15: REGULATORY INFORMATION

Bortezomib

OSHA Hazards: Irritant, Very toxic by ingestion, Very toxic by absorption, Very toxic by inhalation, Target organ effect, Reproductive hazard

DSL Status: components of this product are on the Canadian DSL list.

SARA 302 Components: SARA 302: No chemical in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components: SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title II, Section 313.

SARA 311/312 Hazards: Acute Health Hazard, Chronic Health Hazard

Massachusetts Right To Know Components: No components are subject to the Massachusetts Right to Know Act.



Date: 9/01/2022

Pennsylvania Right To Know Components: Bortezomib, CAS-No. 179324-69-7 New Jersey Right To Know Components: Bortezomib, CAS-No. 179324-69-7

California Prop. 65 Components: No data available

EU regulations

Component	Risk Phrases	Safety Phrases
Bortezomib	R26/27/28, R36/38, R48/23/24, R62, R63	S26, S28, S36/37/39, S38, S45, S53

SECTION 16: OTHER INFORMATION

DISCLAIMER:

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product regarding appropriate safety precautions. It does not represent any guarantee of the properties of the product. Aurora Medbiochem Co. shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.