



The Power to Question

SAFETY DATA SHEET

Santa Cruz Biotechnology, Inc.

Revision date 15-Apr-2020

Version 2.2

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product Identifier

Product Name	Bortezomib
Product Code	SC-217785
CAS No	179324-69-7
Synonyms	Bortezomib also known as Velcade; Radiciol; LDP-341
Pure substance/mixture	Substance
Contains Bortezomib	

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

For research use only. Not intended for diagnostic or therapeutic use.

1.3. Details of the supplier of the safety data sheet

Santa Cruz Biotechnology, Inc.
 10410 Finnell Street
 Dallas, TX 75220
 831.457.3800
 800.457.3801
 scbt@scbt.com

Santa Cruz Biotechnology, Inc.
 Bergheimer Str. 89-2
 69115 Heidelberg, Germany
 +49.6221.4503 0
 +1.800.457.3801
 europe@scbt.com

1.4. Emergency telephone number

Chemtrec
 1.800.424.9300 (Within USA)
 +1.703.527.3887 (Outside USA)

Section 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Acute toxicity - Oral	Category 2 - (H300)
Acute toxicity - Dermal	Category 2 - (H310)
Acute toxicity - Inhalation (Dusts/Mists)	Category 2 - (H330)
Specific target organ toxicity (repeated exposure)	Category 1 - (H372)

2.2. Label Elements

Contains Bortezomib

Signal word

Danger

Symbols/Pictograms



Hazard statements

H372 - Causes damage to organs through prolonged or repeated exposure
 H300 - Fatal if swallowed
 H310 - Fatal in contact with skin
 H330 - Fatal if inhaled

Precautionary Statements - EU (§28, 1272/2008)

P264 - Wash face, hands and any exposed skin thoroughly after handling
 P270 - Do not eat, drink or smoke when using this product



P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
 P321 - Specific treatment (see Emergency Phone Number on this label)
 P330 - Rinse mouth
 P405 - Store locked up
 P501 - Dispose of contents/ container to an approved waste disposal plant
 P262 - Do not get in eyes, on skin, or on clothing
 P280 - Wear protective gloves and protective clothing
 P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
 P310 - Immediately call a POISON CENTER or doctor
 P322 - Specific measures (see Emergency Phone Number on this label)
 P361 - Remove/Take off immediately all contaminated clothing
 P260 - Do not breathe dust/fume/gas/mist/vapors/spray
 P271 - Use only outdoors or in a well-ventilated area
 P284 - Wear respiratory protection
 P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
 P320 - Specific treatment is urgent (see Emergency Phone Number on this label)
 P403 + P233 - Store in a well-ventilated place. Keep container tightly closed
 P314 - Get medical advice/attention if you feel unwell

2.3. Other Hazards

General Hazards

Not applicable

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Molecular Weight 384.24
 Formula $C_{19}H_{25}BN_4O_4$

3.1 Substances

Chemical name	EC No	CAS No.	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Bortezomib	-	179324-69-7	100	Acute Tox. 2 (H300) Acute Tox. 2 (H310) Acute Tox. 2 (H330) STOT RE 1 (H372)

Full text of H- and EUH-phrases: see section 16

Section 4: FIRST AID MEASURES

4.1. Description of first aid measures

General advice Immediate medical attention is required. If symptoms persist, call a physician.
 Inhalation Immediate medical attention is required. Remove to fresh air. If not breathing, give artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Move to fresh air in case of accidental inhalation of vapors. If symptoms persist, call a physician.
 Skin Contact Immediate medical attention is required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. Wash off immediately with plenty of water. If skin irritation persists, call a physician.
 Eye contact Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. Call a physician immediately. Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and



Ingestion	upper eyelids. Consult a physician. If symptoms persist, call a physician. Do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. Drink plenty of water. Clean mouth with water and drink afterwards plenty of water. Call a physician.
Self-protection of the first aider	Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms No information available.

4.3. Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

Section 5: FIRE FIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical No information available

Hazardous combustion products Carbon oxides. Nitrogen oxides (NOx).

5.3. Advice for firefighters

Special protective equipment for fire-fighters Wear self-contained breathing apparatus and protective suit. Wear self contained breathing apparatus for fire fighting if necessary.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Use personal protective equipment as required. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas.

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so. Cover powder spill with plastic sheet or tarp to minimize spreading. Dike far ahead of liquid spill for later disposal.

Methods for cleaning up Use personal protective equipment as required. Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry. Take up mechanically, placing in appropriate containers for disposal. Avoid creating dust. Clean contaminated surface thoroughly. Soak up with inert absorbent material. Dam up. Pick up and transfer to properly labeled containers. Sweep up and shovel into suitable containers for disposal. After cleaning, flush away traces with water. Take precautionary measures against static discharges.

6.4. Reference to other sections

See Section 12: ECOLOGICAL INFORMATION.

Section 7: HANDLING AND STORAGE

7.1. Precautions for safe handling



Advice on safe handling	Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Wash contaminated clothing before reuse. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product. Use with local exhaust ventilation. Handle in accordance with good industrial hygiene and safety practice. Corrosive hazard. Wear protective gloves/clothing and eye/face protection.
General Hygiene Considerations	When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Wash hands thoroughly after handling. Keep away from food, drink and animal feeding stuffs.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions	Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep containers tightly closed in a cool, well-ventilated place. Keep in properly labeled containers. Do not allow contact with air.
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7.3. Specific end use(s)

Risk Management Methods (RMM)	The information required is contained in this Material Safety Data Sheet.
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Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure Limits	This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.
Derived No Effect Level (DNEL)	No information available
Predicted No Effect Concentration (PNEC)	No information available.

8.2. Exposure controls

Engineering Controls	Showers Eyewash stations Ventilation systems
Eye/face protection	Tight sealing safety goggles. Face protection shield.
Skin and Body Protection	Gloves made of plastic or rubber. Suitable protective clothing. Suitable protective clothing. Apron.
Respiratory protection	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
Environmental exposure controls	No information available.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid
Appearance	No information available
Odor	No information available

Property	Values
pH	No information available
Melting point/freezing point	139 °C
Boiling point	684.30 °C
Flash point	No information available
Liquid Density	1.21 g/cm ³
Evaporation rate	No information available
Upper flammability limits	No information available
Lower flammability limit	No information available
Vapor pressure	No information available
Vapor density	No information available
Specific gravity	No information available
Water solubility	No information available
Solubility in other solvents	No information available
Partition coefficient	2.00
Autoignition temperature	No information available



Decomposition temperature	No information available
Kinematic viscosity	No information available
Explosive properties	No information available
Oxidizing properties	No information available

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity

Reactivity Not applicable

10.2. Chemical stability

Stability Stable under recommended storage conditions.
Sensitivity to Mechanical Impact No information available.
Sensitivity to Static Discharge No information available.

10.3. Possibility of hazardous reactions

Hazardous polymerization No information available.
Possibility of Hazardous Reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid Do not allow contact with air.

10.5. Incompatible materials

Incompatible materials Strong oxidizing agents.

10.6. Hazardous decomposition products

Hazardous Decomposition Products Carbon oxides. Nitrogen oxides (NOx).

Section 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity

Product Information Product does not present an acute toxicity hazard based on known or supplied information.
Unknown acute toxicity 0% of the mixture consists of ingredient(s) of unknown toxicity.

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 5.01 mg/kg
ATEmix (dermal) 50.01 mg/kg
ATEmix (inhalation-dust/mist) 0.05 mg/l

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity May cause long lasting harmful effects to aquatic life.
Unknown aquatic toxicity 100% of the mixture consists of components(s) of unknown hazards to the aquatic environment.

12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential



Bioaccumulation No information available.

12.4. Mobility in soil

Mobility No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment No information available.

12.6. Other adverse effects

Other adverse effects No information available

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from residues/unused products Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging Do not reuse container.

Other Information Waste codes should be assigned by the user based on the application for which the product was used.

Section 14: TRANSPORT INFORMATION

	<u>RID / ADR</u>	<u>IMDG</u>	<u>ICAO (air) / IATA</u>
14.1 UN/ID no	UN3249	UN3249	UN3249
14.2 Proper shipping name	Medicine, solid, toxic, n.o.s.	Medicine, solid, toxic, n.o.s.	Medicine, solid, toxic, n.o.s.
14.3 Hazard Class	6.1	6.1	6.1
Subsidiary hazard class / Labels	-	-	-
14.4 Packing Group	II	II	II
14.5 14.5 Environmental Hazard	-	-	-
14.6 14.6 Special Provisions	221, 601	221	A3
	Classification code T2 Tunnel restriction code (D/E)	EmS-No F-A, S-A	ERG Code 6L

Section 15: REGULATORY INFORMATION

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

National Regulations

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

International Inventories

All of the components in the product are on the following Inventory lists

No information available

X - Listed

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances



ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances

15.2. Chemical safety assessment

Chemical Safety Report No information available

Section 16: OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3	H300 - Fatal if swallowed H310 - Fatal in contact with skin H330 - Fatal if inhaled H372 - Causes damage to organs through prolonged or repeated exposure
Revision note	No information available.

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

End of Safety Data Sheet