

**Order
Number**
**Customer
Number**

1. Identification of the substance/preparation and of the company/undertaking

Product name : Brevetoxin PbTx-2, *Ptychodiscus brevis*
Catalog # : 203732
Supplier : Calbiochem-Novabiochem Corp.
10394 Pacific Center Court
San Diego, CA 92121
Chemical formula : C₅₀H₇₀O₁₄
Emergency telephone number : **Call Chemtrec®**
(800)424-9300 (within U.S.A.)
(703)527-3887 (outside U.S.A.)

2. Composition / information on ingredients

Substance/Preparation : Substance

Chemical name*	CAS No.	EC Number	Symbol	R-Phrases
1) Brevetoxin PbTx-2, <i>Ptychodiscus brevis</i>	79580-28-2	Not available.	T+	R26/27/28

3. Hazards identification

Physical/chemical hazards : Not applicable.

Human health hazards : Very toxic by inhalation, in contact with skin and if swallowed.

4. First-aid measures

First-Aid measures

- Inhalation** : If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.
- Ingestion** : If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.
- Skin Contact** : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.
- Eye Contact** : Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention.

Effects and symptoms

- Inhalation** : Extremely hazardous in case of inhalation. May be fatal if inhaled.
- Ingestion** : Extremely hazardous in case of ingestion. May be fatal if swallowed.
- Skin Contact** : Extremely hazardous in case of skin contact (permeator). Severe over-exposure can result in death.

Aggravating conditions : Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

5. Fire-fighting measures

Extinguishing Media

Suitable : SMALL FIRE: Use DRY chemical powder.
LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Hazardous thermal (de)composition products : These products are carbon oxides (CO, CO₂).

Special fire-fighting procedures : Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

Protection of fire-fighters : Be sure to use an approved/certified respirator or equivalent.

6. Accidental release measures

- Personal precautions** : Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
- Environmental Precautions and Clean-up Methods** : Poisonous solid.
Stop leak if without risk. Do not get water inside container. Do not touch spilled material. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all ignition sources. Call for assistance on disposal.

7. Handling and storage

- Handling** : Keep locked up. Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe dust. Avoid contact with skin. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents.
- Storage** : Keep container tightly closed. Keep container in a cool, well-ventilated area. Do not store above -20°C (-4°F).
- Packaging materials**
- Recommended use** : Use original container.

8. Exposure controls/personal protection

- Engineering measures** : Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
- Hygiene measures** : Wash hands, forearms, and face thoroughly after handling compounds and before eating, smoking, using lavatory, and at the end of day.

<u>Ingredient Name</u>	<u>Occupational Exposure Limits</u>
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1) Brevetoxin PbTx-2, <i>Ptychodiscus brevis</i>	Not available.
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Personal protective equipment

- Respiratory system** : Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.
- Skin and body** : Lab coat.
- Hands** : Gloves.
- Eyes** : Safety glasses.

9. Physical and chemical properties

- Physical state** : Solid. (Solid powder.)
- Color** : Light tan. (Light.)
- Melting Point** : 265 to 270°C (509 to 518°F)
- Density** : Not available.
- Solubility** : Easily soluble in cold water, methanol.
- Flash point** : Not available.
- Explosive properties** : Risks of explosion of the product in presence of mechanical impact: Not available.
Risks of explosion of the product in presence of static discharge: Not available.

10. Stability and reactivity

- Stability** : The product is stable.
- Materials to avoid** : Reactive with oxidizing agents.
- Hazardous Decomposition Products** : These products are carbon oxides (CO, CO2).

11. Toxicological information

RTECS # : **XW5886000**

Local effects

Skin irritation : Not available.

Acute toxicity : LD50: Not available.
LC50: Not available.

Chronic toxicity : Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

12. Ecological information

Ecotoxicity : Not available.

13. Disposal considerations

Methods of disposal; Waste of residues; Contaminated packaging : Waste must be disposed of in accordance with federal, state and local environmental control regulations.

14. Transport information

International transport regulations

UN number : UN2811

Land - Road/Railway

Proper shipping name : Toxic solid, organic, n.o.s.*

ADR/RID Class : CLASS 6.1: Toxic substance.

Packing Group : I

ADR/RID label :



Sea

Proper shipping name : Toxic solid, organic, n.o.s.*

IMDG Class : CLASS 6.1: Toxic substance.

Packing Group : I

IMDG label :



Air

Proper shipping name : Toxic solid, organic, n.o.s.*

UN/ID Number : UN2811

IATA-DGR Class : CLASS 6.1: Toxic substance.

IATA label :



15. Regulatory information

EU Regulations

Hazard symbol(s) :



Classification : Very toxic

Risk Phrases : R26/27/28- Very toxic by inhalation, in contact with skin and if swallowed.

Safety Phrases : S22- Do not breathe dust.
S36/37/39- Wear suitable protective clothing, gloves and eye/face protection.
S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Contains : - Brevetoxin PbTx-2, *Ptychodiscus brevis*

16. Other information

Notice to Reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Date of issue

Catalog # 203732

11/13/2000.

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