

PX-478 Dihydrochloride SDS | MSDS

1.PRODUCT AND COMPANY IDENTIFICATION

Product identifier

- **Product Name:** PX-478 Dihydrochloride
- **Catalog Number:** S7612
- **CAS Number:** 685898-44-6
- **IUPAC Name:** 4-[bis(2-chloroethyl)oxidoamino]-L-phenylalanine,hydrochloride (1:2)

Relevant identified uses and uses advised against

- **Identified uses:** For research and development use only; laboratory chemicals; manufacture of substances.
- **Uses advised against:** Not for pharmaceutical, household, or other unapproved uses.

Details of the supplier

- **Company :** Selleck Chemicals
- **TollFree :** +1 877 796-6397
- **Tel :** +1 832 582-8158
- **Fax :** +1 832 582-8590

Emergency telephone number

- **Emergency phone #:** +1 832 582-8158

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS):

- Acute toxicity, oral (Category 4), H302
- Skin corrosion/irritation (Category 2), H315
- Serious eye damage/eye irritation (Category 2A), H319
- Specific target organ toxicity, single exposure; Respiratory tract irritation (Category 3), H335

2.2 GHS Label elements, including precautionary statements

Pictogram:



Signal word: Warning

Hazard statement(s):

- H302 Harmful if swallowed
- H315 Causes skin irritation
- H319 Causes serious eye irritation
- H335 May cause respiratory irritation

Precautionary statement(s):

Prevention

- P261 Avoid breathing powder/fume/gas/mist/vapours/spray.
- P264 Wash hands thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P271 Use only outdoors or in a well-ventilated area.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response

- 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.
- P330 Rinse mouth.
- P362+P364 Take off contaminated clothing and wash it before reuse.

Storage

- P403+P233 Store in a well-ventilated place. Keep container tightly closed.
- P405 Store locked up.

Disposal

- P501 Dispose of contents/container in accordance with local regulation.

2.3 Other hazards

None.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Name: 4-[bis(2-chloroethyl)oxidoamino]-L-phenylalanine,hydrochloride (1:2)

Molecular Weight: 394.12

CAS No.: 685898-44-6

4. FIRST AID MEASURES

4.1 Description of first aid measures

- **Eye contact:** Where Diphoterine is not available, rinse eyes with copious amounts of water for at least 20 minutes. Protect uninjured eye. Remove contact lenses if present and easy to do. Continue rinsing and seek immediate medical attention.

- **Skin contact:** Where Diphoterine is not available, wash immediately with plenty of water and soap. Remove contaminated clothing immediately. Immediately seek medical attention.

- **Inhalation:** Remove person to fresh air and keep comfortable for breathing. Call a poison centre or physician if you feel unwell. If breathing is irregular or stopped, administer artificial respiration.

- **Ingestion:** If accidentally swallowed, rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Do not induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

No known symptoms or effects.

4.3 Indication of any immediate medical attention and special treatment needed

No special immediate treatment required.

5. FIRE FIGHTING MEASURES

5.1 Extinguishing media

- **Suitable fire extinguishing media:** Carbon dioxide, alcohol resistant foam or dry chemical powder. Use water to extinguish fire.

- **Unsuitable fire extinguishing media:** No known unsuitable media.

5.2 Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapours.

5.3 Advice for firefighters

- **Special protective equipment for firefighters:** Use personal protective equipment.

- **Specific extinguishing methods:** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Immediately evacuate personnel to safe areas. Remove undamaged containers from fire area if it is safe to do so.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid powder formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Keep personnel away from spill/leak.

6.2 Environmental precautions

Prevent further leakage if safe to do so. Prevent product from entering drains. Do not let product enter waterways or sewer systems. Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up

Absorb the spilled material with an inert absorbent (e.g. sand, silica gel, rag, vermiculite) before transferring into an airtight container. Remove all sources of ignition. Dispose of appropriately according to local regulations.

6.4 Reference to other sections

For personal protection see section 8. For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

- **Safe handling:** Wear appropriate personal protective equipment. Use only under a chemical fume hood. Keep away from heat/sparks/open flame/hot surfaces. Take measures to prevent the build-up of electrostatic charge. Ensure adequate exhaust ventilation, especially if powder, aerosol or fumes will be generated. Avoid contact with skin, eyes and clothing. For precautions see section 2.2.

- **Protections against explosions and fire:** Where possible, use anti-static and spark-proof equipment when handling.

- **General occupational hygiene:** Handle in accordance with good industrial hygiene and safety practice. Wash hands before and after use. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing before re-use.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly sealed in cool, well-ventilated area. Keep away from direct sunlight and sources of ignition.

Recommended storage temperature: -20°C, stored under nitrogen, away from moisture.

• In solvent: -80°C, 6 months; -20°C, 1 month (stored under nitrogen, away from moisture).

Shipping at room temperature if less than 2 weeks.

7.3 Specific end use(s)

No specific end uses are advised. The products supplied are for research purposes only.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters: This product contains no substances with occupational exposure limit values.

8.2 Exposure controls

- **Engineering controls:** Use only under a chemical fume hood ensuring adequate ventilation, especially in confined areas. Use explosion-proof electrical/ventilating/lighting/equipment. Ensure that eyewash stations and safety showers are close to the workstation location.

- **Personal protective equipment:**

- **Eye protection:** Safety goggles with side-shields.

- **Hand protection:** Protective gloves.

- **Skin and body protection:** Impervious clothing.

- **Respiratory protection:** Suitable respirator.

- **Hygiene measures:** Ensure hair or skin particles cannot enter the chemical container.

- **Environment exposure controls:** Avoid discharge into the environment, see section 6.2.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

- **Appearance:** powder
- **Odor:** N/A
- **Odor threshold:** N/A
- **pH:** N/A
- **Melting/freezing point:** N/A
- **Boiling point/range:** N/A
- **Flash point:** N/A
- **Evaporation rate:** N/A
- **Flammability (solid, gas):** N/A
- **Upper/lower flammability or explosive limits:** N/A
- **Vapor pressure:** N/A
- **Vapor density:** N/A
- **Relative density:** N/A
- **Water Solubility:** N/A
- **Partition coefficient:** N/A
- **Auto-ignition temperature:** N/A
- **Decomposition temperature:** N/A
- **Viscosity:** N/A
- **Explosive properties:** N/A
- **Oxidizing properties:** N/A

9.2 Other safety information

N/A.

10. STABILITY AND REACTIVITY

10.1 Reactivity

N/A.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

None under normal storage conditions.

10.4 Conditions to avoid

Heat, sparks, open flames, sources of ignition. Exposure to moisture.

10.5 Incompatible materials

Strong acids/alkalis, strong oxidising/reducing agents.

10.6 Hazardous decomposition products

Under fire conditions, may decompose and emit toxic fumes. Other decomposition products - no data available.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

- **Acute toxicity:** No Toxicology data available for this product.
- **Skin corrosion/irritation:** No toxicological data available for this product.
- **Serious eye damage/irritation:** No toxicological data available for this product.
- **Respiratory or skin sensitisation:** No toxicological data available for this product.
- **Germ cell mutagenicity:** No toxicological data available for this product.
- **Carcinogenicity:** No toxicological data available for this product.
- **Reproductive toxicity:** No toxicological data available for this product.
- **Specific target organ toxicity - single exposure:** No toxicological data available for this product.
- **Specific target organ toxicity - repeated exposure:** No toxicological data available for this product.
- **Aspiration hazard:** No toxicological data available for this product.
- **Additional information:** This information is based on our current knowledge. However the chemical, physical, and toxicological properties have not been completely investigated.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

N/A.

12.2 Persistence and degradability

No Ecological data available for this product.

12.3 Bioaccumulative potential

No Ecological data available for this product.

12.4 Mobility in soil

No Ecological data available for this product.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment unavailable as chemical safety assessment not required or not conducted.

12.6 Other adverse effects

N/A.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

- **Product:** Ensure product is disposed of by licensed waste carriers.
- **Contaminated packaging:** Ensure INNER PACKAGING is disposed of by licensed waste carriers. Some OUTER PACKAGING may be recyclable if not contaminated.

14. TRANSPORT INFORMATION

DOT (US)

- **Proper shipping name:** Not dangerous goods
- **UN number:** -
- **Class:** -
- **Packing group:** -

IMDG

- **Proper shipping name:** Not dangerous goods
- **UN number:** -
- **Class:** -
- **Packing group:** -

IATA

- **Proper shipping name:** Not dangerous goods
- **UN number:** -
- **Class:** -
- **Packing group:** -

15. REGULATORY INFORMATION

SARA 302 Components:

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

SARA 313 Components:

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

SARA 311/312 Hazards:

No SARA Hazards.

Massachusetts Right To Know Components:

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components:

No components are subject to the Pennsylvania Right to Know Act.

New Jersey Right To Know Components:

No components are subject to the New Jersey Right to Know Act.

California Prop. 65 Components:

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or anyother reproductive harm.

16. OTHER INFORMATION

Revision Date: 2026/07/21

Further Information: The information provided is believed to be correct but is not exhaustive and should be used only as a guideline based on current knowledge. It does not represent a guarantee of the properties of the product. Selleck Chemicals Corporation and its Affiliates shall not be held liable for any damage resulting from handling or contact with the product.