

Panobinostat (LBH589) SDS | MSDS

1.PRODUCT AND COMPANY IDENTIFICATION

Product identifier

- **Product Name:** Panobinostat (LBH589)
- **Catalog Number:** S1030
- **CAS Number:** 404950-80-7
- **IUPAC Name:** (E)-N-hydroxy-3-(4-((2-(2-methyl-1H-indol-3-yl)ethylamino)methyl)phenyl)acrylamide

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 3), H301
- Acute toxicity, Inhalation (Category 3), H331
- Skin irritation (Category 2), H315
- Serious eye damage (Category 1), H318
- Reproductive toxicity (Category 1B), H360
- Specific target organ toxicity - repeated exposure, Inhalation (Category 2), H373

2.2 GHS Label elements, including precautionary statements

Pictogram:



Signal Word: Danger

Hazard Statements:

- H301 + H331 Toxic if swallowed or if inhaled.
- H315 Causes skin irritation.
- H318 Causes serious eye damage.
- H360 May damage fertility or the unborn child.
- H373 May cause damage to organs through prolonged or repeated exposure if inhaled.

Precautionary Statements:

- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P260 Do not breathe powder.
- P264 Wash skin 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.
- P301 + P310 + P330 IF SWALLOWED: Immediately call a POISON CENTER/ doctor. Rinse mouth.
- P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
- P304 + P340 + P311 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor.
- P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.
- P308 + P313 IF exposed or concerned: Get medical advice/ attention.
- P332 + P313 If skin irritation occurs: Get medical advice/ attention.
- P362 Take off contaminated clothing and wash before reuse.
- P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
- P405 Store locked up.
- P501 Dispose of contents/ container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

None.

3. Composition/information on ingredients

3.1 Substances

- **Chemical Name:** Panobinostat (LBH589)
- **Formula:** (E)-N-hydroxy-3-(4-((2-(2-methyl-1H-indol-3-yl)ethylamino)methyl)phenyl)acrylamide

- **CAS-No.:** 404950-80-7
- **EC-No.:** 803-814-1
- **Concentration:** <= 100 %
- **Component Classification:** Acute Tox. 3; Skin Irrit. 2; Eye Dam. 1; Repr. 1B; STOT RE 2; H301, H331, H315, H318, H360, H373

4. First aid measures

4.1 Description of first-aid measures

- **General advice:** First aiders need to protect themselves. Show this material safety data sheet to the doctor in attendance.
- **If inhaled:** After inhalation: fresh air. Immediately call in physician. If breathing stops: immediately apply artificial respiration, if necessary also oxygen.
- **In case of skin contact:** Take off immediately all contaminated clothing. Rinse skin with water/ shower. Consult a physician.
- **In case of eye contact:** After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses.
- **If swallowed:** Give water to drink (two glasses at most). Seek medical advice immediately. In exceptional cases only, if medical care is not available within one hour, induce vomiting (only in persons who are wide awake and fully conscious), administer activated charcoal (20 - 40 g in a 10% slurry) and consult a doctor as quickly as possible.

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 2.2) and/or in section 11.

4.3 Indication of any immediate medical attention and special treatment needed

N/A.

5. Firefighting measures

5.1 Extinguishing media

- **Suitable extinguishing media:** Water, Foam, Carbon dioxide (CO₂), Dry powder.
- **Unsuitable extinguishing media:** For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Carbon oxides, Nitrogen oxides (NO_x). Combustible. Development of hazardous combustion gases or vapours possible in the event of fire.

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

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

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid generation and inhalation of powder in all circumstances. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully. Dispose of properly. Clean up affected area. Avoid generation of powder.

6.4 Reference to other sections

For disposal see section 13.

7. Handling and storage

7.1 Precautions for safe handling

- **Advice on safe handling:** Work under hood. Do not inhale substance/mixture.
- **Hygiene measures:** Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

- **Storage conditions:** Tightly closed. Dry. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorized persons.
- **Recommended storage temperature:** 2 - 8 °C.

- **Storage class (TRGS 510):** 6.1C: Combustible, acute toxic Cat.3 / toxic compounds or compounds which causing chronic effects.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

8. Exposure controls/personal protection

8.1 Control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

- **Appropriate engineering controls:** Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.
- **Eye/face protection:** Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Tightly fitting safety goggles.
- **Skin protection:** Handle with impervious gloves. Full and splash contact material: Nitrile rubber; Minimum layer thickness: 0.11 mm; Break through time: 480 min.
- **Body Protection:** Protective clothing.
- **Respiratory protection:** Required when powder is generated. Recommended Filter type: Filter type P3. The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer.
- **Control of environmental exposure:** Do not let product enter drains.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

- a) Appearance Form: powder
- b) Odor: N/A
- c) Odor Threshold: N/A
- d) pH: N/A
- e) Melting point/range: 156 - 168 °C (313 - 334 °F)
- f) Initial boiling point and boiling range: N/A
- g) Flash point: Not applicable
- h) Evaporation rate: N/A
- i) Flammability (powder, gas): N/A
- j) Upper/lower flammability or explosive limits: N/A
- k) Vapor pressure: N/A
- l) Vapor density: N/A

- m) Density: N/A; Relative density: N/A
- n) Water solubility: N/A
- o) Partition coefficient: n-octanol/water: N/A
- p) Autoignition temperature: N/A
- q) Decomposition temperature: N/A
- r) Viscosity: N/A
- s) Explosive properties: N/A
- t) Oxidizing properties: none

9.2 Other safety information

N/A.

10. Stability and reactivity

10.1 Reactivity

The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a powder explosion potential may generally be assumed.

10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature).

10.3 Possibility of hazardous reactions

N/A.

10.4 Conditions to avoid

No information available.

10.5 Incompatible materials

Strong acids and strong bases, Strong oxidizing agents.

10.6 Hazardous decomposition products

In the event of fire: see section 5.

11. Toxicological information

11.1 Information on toxicological effects

- **Acute toxicity:**

- Oral: Acute toxicity estimate - 100.1 mg/kg (Expert judgment)
- Inhalation: Acute toxicity estimate - 4 h - 0.51 mg/l - powder/mist (Expert judgment)
- Dermal: N/A

- **Skin corrosion/irritation:** Remarks: Causes skin irritation.

- **Serious eye damage/eye irritation:** Remarks: Causes severe burns.

- **Respiratory or skin sensitization:** N/A.

- **Germ cell mutagenicity:** N/A.

- **Carcinogenicity:** No ingredient of this product present at levels greater than or equal to 0.1% is identified as a probable, possible or confirmed human carcinogen by IARC, NTP, or OSHA.

- **Reproductive toxicity:** Presumed human reproductive toxicant.

16. OTHER INFORMATION

Revision Date: 2026/07/29

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.