

Docetaxel SDS | MSDS

1.PRODUCT AND COMPANY IDENTIFICATION

Product identifier

- **Product Name:** Docetaxel
- **Catalog Number:** S1148
- **CAS Number:** 114977-28-5
- **IUPAC Name:** Benzenepropanoic acid, β -[[[(1,1-dimethylethoxy)carbonyl]amino]- α -hydroxy-, (2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-12b-(acetyloxy)-12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,6,11-trihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl ester, (α R, β S)-

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

GHS Classification:

- Skin irritation: Category 2
- Eye irritation: Category 2A
- Germ cell mutagenicity: Category 2
- Reproductive toxicity: Category 1B
- Effects on or via lactation
- Specific target organ toxicity - repeated exposure: Category 1

Pictogram:



Signal word: Danger

Hazard statements:

- H315: Causes skin irritation.
- H319: Causes serious eye irritation.
- H341: Suspected of causing genetic defects.
- H360: May damage fertility or the unborn child.
- H362: May cause harm to breast-fed children.
- H372: Causes damage to organs through prolonged or repeated exposure.

Precautionary statements:

- **Prevention:** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe powder. Avoid contact during pregnancy/while nursing. Wash skin thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection.
- **Response:** IF ON SKIN: Wash with plenty of soap and water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed or concerned: Get medical advice/attention. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse.
- **Storage:** Store locked up.
- **Disposal:** Dispose of contents/container to an approved waste disposal plant.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture: Substance

CAS-No.: 114977-28-5

Components:

- **Chemical name:** Benzenepropanoic acid, β -[[(1,1-dimethylethoxy)carbonyl]amino]- α -hydroxy-, (2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-12b-(acetyloxy)-12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,6,11-trihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl ester, (α R, β S)-
- **CAS No.:** 114977-28-5
- **Concentration (% w/w):** ≥ 90 - ≤ 100

4. FIRST AID MEASURES

- **General advice:** Show this safety data sheet to the doctor in attendance.
- **If inhaled:** Move to fresh air. Call a physician.
- **In case of skin contact:** Take off immediately all contaminated clothing. Rinse skin with water/shower. Consult a physician.
- **In case of eye contact:** Rinse out with plenty of water. Call an ophthalmologist. Remove contact lenses.
- **If swallowed:** Immediately make victim drink water (two glasses at most). Consult a physician.
- **Most important symptoms and effects:** The most important known symptoms and effects are described in the labelling (Section 2) and/or Section 11.
- **Protection of first-aiders:** Refer to Section 8 for personal protection.

5. FIREFIGHTING MEASURES

- **Suitable extinguishing media:** Water, Foam, Carbon dioxide (CO₂), Dry powder.
- **Unsuitable extinguishing media:** No limitations of extinguishing agents are given for this substance.
- **Specific hazards:** Combustible. Development of hazardous combustion gases or vapors (Carbon oxides, Nitrogen oxides) is possible in the event of fire.
- **Further information:** Suppress gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface or ground water systems.
- **Special protective equipment:** Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by wearing suitable protective clothing.

6. ACCIDENTAL RELEASE MEASURES

- **Personal precautions:** Avoid generation and inhalation of powder in all circumstances. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area and consult an expert.
- **Environmental precautions:** Do not let product enter drains.
- **Methods for containment and cleaning up:** Cover drains. Collect, bind, and pump off spills. Take up carefully and dispose of properly. Clean up affected area. Avoid generation of powder.

7. HANDLING AND STORAGE

- **Advice on safe handling:** Work under a hood. Do not inhale substance/mixture. Refer to Section 2.2 for precautions.
- **Storage conditions:** Tightly closed and dry. Keep in a well-ventilated place. Keep locked up or in an area accessible only to authorized persons.
- **Storage class:** 6.1C (Combustible, acute toxic Cat.3 / toxic compounds or compounds causing chronic effects).
- **Recommended storage temperature:** See product label.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- **Control parameters:** Contains no substances with occupational exposure limit values.
- **Engineering measures:** N/A
- **Personal protective equipment:**
 - **Respiratory protection:** Required when powder is generated. Recommended filter type P3 (DIN EN 143).
 - **Eye protection:** Safety glasses tested and approved under government standards such as NIOSH (US) or EN 166 (EU).
 - **Skin and body protection:** Protective clothing.
 - **Hygiene measures:** Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

9. PHYSICAL AND CHEMICAL PROPERTIES

- **Appearance:** powder
- **Color:** white
- **Odor:** N/A
- **Melting point/range:** 367 - 378 °F / 186 - 192 °C
- **Flash point:** Not applicable
- **Solubility(ies):** Water solubility is insoluble
- **Oxidizing properties:** none
- **Molecular weight:** 807.88 g/mol
- **Other properties:** No specific data provided for other physical properties.

10. STABILITY AND REACTIVITY

- **Reactivity:** Flammable organic substances in fine distribution may have a powder explosion potential when whirled up.
- **Chemical stability:** Chemically stable under standard ambient conditions (room temperature).
- **Possibility of hazardous reactions:** N/A.
- **Conditions to avoid:** No information available.
- **Incompatible materials:** Strong oxidizing agents.
- **Hazardous decomposition products:** In the event of fire, see Section 5.

11. TOXICOLOGICAL INFORMATION

- **Acute toxicity:** LD50 Oral (Rat) > 2,000 mg/kg. Inhalation and dermal data not available.
- **Skin corrosion/irritation:** Causes skin irritation.
- **Serious eye damage/eye irritation:** Rabbit - Result: Eye irritation.
- **Respiratory or skin sensitization:** N/A.
- **Germ cell mutagenicity:** Suspected of causing genetic defects. Positive results in chromosome aberration tests (Chinese hamster ovary cells) and micronucleus tests (CHO).
- **Carcinogenicity:** No component present at levels $\geq 0.1\%$ is identified as a carcinogen by IARC, NTP, or OSHA.
- **Reproductive toxicity:** May damage the unborn child. Studies indicate a hazard to babies during the lactation period.
- **STOT - single exposure:** N/A.
- **STOT - repeated exposure:** Causes damage to organs (Bone marrow) through prolonged or repeated exposure.
- **Aspiration hazard:** N/A.
- **Additional Information:** RTECS: DA4172750. Docetaxel belongs to the taxoid family and inhibits the growth of malignant cells. Symptoms may include paresthesia and lowered blood pressure.

12. ECOLOGICAL INFORMATION

N/A

13. DISPOSAL CONSIDERATIONS

• **Waste from residues:** Waste material must be disposed of in accordance with national and local regulations. Leave chemicals in original containers. Do not mix with other waste. Handle uncleaned containers as the product itself.

14. TRANSPORT INFORMATION

- **IATA-DGR:** Not regulated as a dangerous good.
- **IMDG-Code:** Not regulated as a dangerous good.
- **49 CFR Road:** Not regulated as a dangerous good.
- **Poison Inhalation Hazard:** No.
- **Special precautions:** Not classified as dangerous in the meaning of transport regulations.

15. REGULATORY INFORMATION

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

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 III, Section 313.

US State Regulations

Massachusetts Right To Know

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

Maine Chemicals of High Concern

Product does not contain any listed chemicals

Vermont Chemicals of High Concern

Product does not contain any listed chemicals

Washington Chemicals of High Concern

Product does not contain any listed chemicals

The components of this product are reported in the following inventories:

TSCA : Product contains substance(s) not listed on TSCA inventory.

TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

16. OTHER INFORMATION

Revision Date: 2026/07/10

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.