

Paclitaxel

Cat#: orb61089 (MSDS)

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Paclitaxel

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

Component	Description	Volume	Safety Information
Paclitaxel	Solid	25 mg	See below

SECTION 3: HAZARDS IDENTIFICATION

Product Name/Chemical Name	CAS Number	EC-No.	MW	Chemical Formula	Concentration
Paclitaxel	33069-62-4	--	853.92	C ₄₇ H ₅₁ NO ₁₄	100%

Paclitaxel:

Emergency Overview

OSHA Hazards: Target organ effect, Skin sensitizer, Irritant, Reproductive hazard, Mutagen

Target Organs: Cardiovascular system, Nerves, Eyes, Kidney, Liver, Bone marrow

GHS Classification: Germ cell mutagenicity (Category 2), H341

Reproductive toxicity (Category 1B), H360

Specific target organ toxicity - single exposure (Category 1), Eyes, H370

GHS Label elements, including precautionary statements



Pictogram:

Signal word: Danger

Hazard statement(s):

H341 Suspected of causing genetic defects.

H360 May damage fertility or the unborn child.

H370 Causes damage to organs (Eyes).

Precautionary statement(s):

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

P307 + P311 IF exposed: Call a POISON CENTER or doctor/ physician.

P405 Store locked up.

P501 Dispose of contents/ container to an approved waste disposal plant.

HMIS Classification

Health hazard: 2

Chronic health hazard: *

Flammability: 0

Physical hazards: 0

NFPA Rating

Health Hazard: 2

Fire: 0

Reactivity Hazard: 0

Potential Health Effects

Inhalation: May be harmful if inhaled. Causes respiratory tract irritation.

Skin: May be harmful if absorbed through skin. Causes skin irritation.

Eyes: Causes eye irritation.

Ingestion: May be harmful if swallowed.

SECTION 4: FIRST AID MEASURES

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact: Wash off with soap and plenty of water. Consult a physician.

In case of eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5: FIRE-FIGHTING MEASURES

Condition of flammability: Not flammable or combustible.

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for fire-fighters: Wear self-contained breathing apparatus for firefighting if necessary.

Hazardous combustion products: Hazardous decomposition products formed under fire conditions— none.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions: Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist, gas, or dust. Ensure adequate ventilation. Evacuate personnel to safe areas.

Environmental precautions: Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods for cleaning up: Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. **Conditions for safe storage**

Keep container tightly closed in a dry and well-ventilated place.

Recommended storage temperature: -20°C

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

Personal protective equipment

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye protection

Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection

Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of the workday.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Property	Paclitaxel
Appearance:	White solid
pH:	3.0-8.0
Water Solubility:	Insoluble
Specific Gravity (g/ml):	No data available
Boiling Point (°C):	No data available
Melting Point (°C):	213 oC (415 oF)
Flash Point (°C):	No data available
Ignition Temperature (°C):	No data available
Density	0.200 g/cm ³

SECTION 10: STABILITY AND REACTIVITY

Property	Paclitaxel
Chemical stability	Stable under recommended storage conditions
Conditions to avoid:	No data available
Materials to avoid:	Oxidizing agents
Hazardous decomposition products:	Carbon oxides, nitrogen oxides

SECTION 11: TOXICOLOGICAL INFORMATION

Paclitaxel:

Acute toxicity: no data available

Skin corrosion/irritation: no data available

Serious eye damage/eye irritation: no data available

Respiratory or skin sensitization: no data available

Germ cell mutagenicity: Laboratory experiments have shown mutagenic effects.

Carcinogenicity:

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: May damage the unborn child. Positive evidence from human epidemiological studies.

Teratogenicity: Suspected human reproductive toxicant.

Developmental toxicity – rat – intravenous Specific Developmental Abnormalities: Musculoskeletal system.

Effects on Newborn: Delayed effects.

Specific target organ toxicity – single exposure (GHS): May cause respiratory irritation.

Specific target organ toxicity – repeated exposure (GHS): Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard: no data available

Potential Health Effects

Inhalation: May be harmful if inhaled. Causes respiratory tract irritation.

Skin: May be harmful if absorbed through skin. Causes skin irritation.

Eyes: Causes eye irritation.

Ingestion: May be harmful if swallowed.

Signs and Symptoms of Exposure: Alopecia, liver injury may occur, kidney injury may occur, nausea, headache, vomiting, bone marrow depression.

Synergistic Effects: no data available

Additional information: RTECS: DA8340700

SECTION 12: ECOLOGICAL INFORMATION

Paclitaxel:

Persistence and degradability: no data available

Toxicity: no data available

Bioaccumulative potential: no data available

Mobility in soil: no data available

PBT and vPvB assessment: no data available

Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

SECTION 13: DISPOSAL CONSIDERATIONS

Product: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging: Dispose of as unused product.

SECTION 14: TRANSPORT INFORMATION

Paclitaxel:

DOT (US): Not dangerous goods.

IMDG: Not dangerous goods.

IATA: Not dangerous goods.

SECTION 15: REGULATORY INFORMATION

Paclitaxel:

OSHA Hazards: Target organ effect, Skin sensitizer, Irritant, Reproductive hazard, Mutagen

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

SARA 313 Components: SARA 313: The following components are subject to reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards: Acute Health Hazard, Chronic Health Hazard

Massachusetts Right To Know Components: No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components: Paclitaxel, CAS-No. 33069-62-4, Revision Date: 2009-07-17;

New Jersey Right To Know Components: Paclitaxel, CAS-No. 33069-62-4, Revision Date: 2009-07-17

California Prop. 65 Components: WARNING: This product can expose you to chemicals including Paclitaxel, which is known to the State of California to cause birth defects or other reproductive harm.

EU regulations

Component	Risk Phrases	Safety Phrases
Paclitaxel	R36/37/38, R45, R60, R61, R64	S23, S24/25, S36/37/39, S60