



Material Safety Data Sheet

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PROGESTERONE

IDENTIFICATION

EMERGENCY OVERVIEW - Reproductive Hazard. WARNING: As a progestin, this material is a possible human carcinogen.

Common Name: Progesterone

Chemical Name: Pregn-4-ene-3,20-dione

Synonym: Corpus luteum hormone

Formula: C₂₁H₃₀O₂

CAS Number: 57-83-0

RTECS Number: TW0175000

Chemical Family: A Steroid

Therapeutic Category: Progestin

INGREDIENT INFORMATION

<u>Principle Components</u>	<u>Percent</u>	<u>Exposure Limits</u>
Progesterone	Pure Material	n/f

HEALTH HAZARD INFORMATION

Usual Adult Dose: The usual oral adult dose of progesterone (micronized to increase bioavailability) is 400 mg a day, given cyclically. It is also given by intramuscular injection in doses of 5 to 10 mg a day.

Adverse Effects: Adverse effects of progestins may include abnormal uterine bleeding, dry mouth, frequent urination, loss of appetite, unusual thirst, unexplained flow of breast milk, mental depression, skin rash, abdominal pain, cramping, dizziness, swelling in ankles or feet, headache, mood changes, nervousness, unusual tiredness or weakness, unusual or rapid weight gain, acne, breast pain or tenderness, hot flashes, insomnia, loss of sexual desire, loss or gain of hair, brown spots on skin, and nausea. Possible allergic reaction to material if inhaled, ingested or in contact with skin.

Overdose Effects: Overdose may cause nausea and uterine bleeding.

Acute: Possible eye, skin and/or respiratory tract irritation.

n/f = not found

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HEALTH HAZARD INFORMATION CONTINUED

Chronic: Possible hypersensitization, changes in menstrual cycle, jaundice, hepatitis, porphyria, blood clots, and cancer.

Inhalation: May cause irritation. Avoid inhalation. Remove to fresh air.

Eye: May cause irritation. Avoid contact. Flush with copious quantities of water.

Skin: May cause irritation. Avoid contact. Flush with copious quantities of water.

Ingestion: May cause irritation. Avoid ingestion. Flush out mouth with water

Medical Conditions Aggravated by Exposure: Hypersensitivity to material, known or suspected breast cancer, liver disease or tumors, pregnancy, thrombophlebitis or thromboembolic disease, and uterine or genital bleeding.

Cross Sensitivity: n/f

Pregnancy Comments: Although progesterone has been used to prevent miscarriage in women with progesterone deficiency, progestins are not recommended for therapeutic use in pregnancy because of the risk of fetal harm.

Pregnancy Category: D

FIRST AID MEASURES

General: Remove from exposure. Remove contaminated clothing. Persons developing serious hypersensitivity (anaphylactic) reactions must receive immediate medical attention. If person is not breathing give artificial respiration. If breathing is difficult give oxygen. Obtain medical attention.

Overdose Treatment: Single acute overdose of progestins will seldom result in toxicity. Supportive treatment is adequate in most situations. In chronic toxicity, obtain a baseline CBC, hepatic and renal function tests, and treat symptomatically. [Poisindex 2001]

TOXICOLOGICAL INFORMATION

Oral Rat: LD50: >5000 mg/kg

Oral Mouse: LD50: n/f

Irritancy Data: n/f

Target Organ(s): Female reproductive system

Listed as a Carcinogen? NTP: Yes IARC: Yes OSHA: No

Other: No

n/f = not found

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FIREFIGHTING MEASURES**Flash Point:** n/f**Upper Flammable Limit:** n/f**Auto-Ignition Temperature:** n/f**Lower Flammable Limit:** n/f**Extinguisher Media:** Water spray, dry chemical, carbon dioxide or foam as appropriate for surrounding fire and materials.**Fire and Explosion Hazards:** This material is assumed to be combustible. As with all dry powders it is advisable to ground mechanical equipment in contact with dry material to dissipate the potential buildup of static electricity.**Firefighting Procedures:** As with all fires, evacuate personnel to a safe area. Firefighters should use self-contained breathing equipment and protective clothing.**PHYSICAL HAZARDS****Conditions to Avoid:** Avoid exposure to light.**Incompatibilities:** Strong oxidizing agents.**Decomposition Products:** When heated to decomposition material emits acrid smoke and irritating fumes. Emits toxic fumes under fire conditions.**Stable?** Yes**Hazardous Polymerization?** No**HANDLING / SPILL / DISPOSAL MEASURES****Handling:** As a general rule, when handling USP Reference Standards avoid all contact and inhalation of dust, mists, and/or vapors associated with the material. Wash thoroughly after handling.**Storage:** Store in tight, light-resistant container as defined in the USP-NF. This material should be handled and stored per label instructions to ensure product integrity.**Spill Response:** Wear approved respiratory protection, chemically compatible gloves and protective clothing. Wipe up spillage or collect spillage using a high efficiency vacuum cleaner. Avoid breathing dust. Wash spill site. Place spillage and all contaminated cleanup materials in a thick plastic hazardous waste disposal bag or leak proof container and label it CAUTION: HAZARDOUS CHEMICAL WASTE.**Disposal:** Place material in a thick plastic hazardous waste disposal bag or leak proof container and label it CAUTION: HAZARDOUS CHEMICAL WASTE. Dispose of waste in accordance with all applicable Federal, State and local laws

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EXPOSURE CONTROLS / PERSONAL PROTECTION

Respiratory Protection: Use a NIOSH approved respirator, if it is determined to be necessary by an industrial hygiene survey involving air monitoring. In the event that a respirator is not required, an approved dust mask should be used.

Ventilation: Recommended.

Gloves: Rubber

Eye Protection: Safety Glasses

Protective Clothing: Protect exposed skin.

PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: White to creamy white crystalline powder; odorless.

Melting Point: 126 - 131° C

Solubility in Water: Practically Soluble

Vapor Density: n/f

Boiling Point: n/f

Evaporation Rate: n/f

Specific Gravity: 1.166 @ 23°

Reactivity in Water: n/f

Vapor Pressure: n/f

% Volatile by Volume: n/f

n/f = not found