

# Material Safety Data Sheet

Revision: 12/27/2005



Hazard information is provided for compliance with both the UK Chemicals (Hazard Information and Packaging) (CHIP) Regulations and the US Hazard Communication Standard (HCS)

## IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

PRODUCT NAME:  
Ergocalciferol

PRODUCT CODE:  
15562

EEC NUMBER:  
200-014-9

### SUPPLIER:

USB Corporation, 26111 Miles Road, Cleveland, Ohio 44128 Phone: (216) 765-5000  
Please visit our website at [www.usbweb.com](http://www.usbweb.com) for contact information on USB product distributors within your area.

### Emergency Contact:

Chemtrec (800) 424-9300  
Outside USA & Canada 703 527 3887

## COMPOSITION/HAZARDOUS COMPONENTS

### HAZARD

### CAS NO.

### %WT

### TLV

### CHIP R & S Phrases

Ergocalciferol

50-14-6

~99%

—

R:28 Very toxic if swallowed.  
R:63 Possible risk of harm to the unborn child.  
S:22 Do not breathe dust.  
S:45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).  
S:36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

## HAZARDS IDENTIFICATION

### CHIP

Very Toxic

### HCS

Highly Toxic

## FIRST-AID MEASURES

EYES: Flush with water for 15 minutes. Seek medical advice if irritation persists.

SKIN: Flush with water, then wash thoroughly with soap and water. Remove contaminated clothing and wash before reuse. Seek medical attention if irritation persists.

INHALATION: Remove the victim from exposure and move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Keep victim quiet and warm. Seek immediate medical attention.

INGESTION: Drink water and seek immediate medical attention. Avoid alcoholic beverages. Never give anything by mouth to an unconscious person.

## FIRE-FIGHTING INFORMATION

Use media suitable to extinguish the supporting or surrounding fire. Wear NIOSH (or equivalent) approved self contained breathing apparatus. For small fires only: use carbon dioxide, dry powder or foam. Emits toxic fumes under fire conditions. Dry, free flowing dust may present a dust explosion hazard. NFPA Rating: H=3 F=0 R=1. Flash Point = No data available.

## ACCIDENTAL RELEASE MEASURES

Wear appropriate personal protective equipment and clothing including lab coat, safety goggles, gloves and NIOSH-approved respirator. Collect in a manner that does not create dust and place in a suitable waste container. Avoid contact of material with skin or eyes. Use adequate ventilation.

## HANDLING AND STORAGE

Wear appropriate personal protective equipment and clothing including lab coat, safety goggles, gloves and NIOSH-approved respirator. Avoid contact of material with skin or eyes. Use adequate ventilation. Store at +4°C away from incompatible substances. Caution: Material is light and air sensitive. Keep container tightly closed. Protect from light and air. Store under nitrogen.

## PERSONAL PROTECTION

Wear appropriate personal protective equipment and clothing including lab coat, safety goggles, gloves and NIOSH-approved respirator. A qualified industrial hygienist should evaluate the need for respiratory protection. Use respiratory protection approved by NIOSH (or equivalent) and appropriate to the hazard. Avoid contact of material with skin or eyes. Mechanical ventilation or local exhaust as needed to control exposure to dust, vapors or mists. Use only in a chemical fume hood. Access to a safety shower and eye-wash. HMIS Rating: H=3 F=0 R=1.

## PHYSICAL AND CHEMICAL PROPERTIES

Appearance: White to light yellow powder  
Vapor Pressure: No data available  
Solubility (Water): Insoluble  
Percent Volatile: No data available  
Chemical Formula: C<sub>28</sub>H<sub>44</sub>O

Boiling Point: Sublimes  
Vapor Density: No data available  
Specific Gravity: No data available  
Evaporation Rate: No data available  
Melting Point: 115-119°C

**STABILITY AND REACTIVITY**

Product is stable under normal conditions. Decomposes on exposure to air and light. Avoid exposure to air and direct light. Hazardous decomposition products may include carbon oxides, acrid smoke and fumes. Incompatible with strong oxidizing agents, strong acids and strong bases. Hazardous polymerization will not occur.

**TOXICOLOGICAL INFORMATION**

**EFFECTS OF OVEREXPOSURE:**

**EYES:** Contact may cause irritation and slight corneal injury.

**SKIN:** May be harmful if absorbed through the skin. Contact may cause irritation and/or allergic reaction.

**INHALATION:** May be harmful if inhaled. May cause irritation to mucous membranes and upper respiratory tract.

**INGESTION:** May be fatal if swallowed. Causes gastrointestinal irritation with nausea, vomiting and diarrhea. May cause weight loss and irritability. Symptoms include weakness, fatigue, lassitude and headache. Mental dullness and coma may develop. Impairs kidney function, symptoms may include excessive thirst and urination. Causes calcification in cornea and conjunctiva in form of band keratopathy. Mimics hyperparathyroidism with muscular weakness, nervousness, itching and hypertension.

**TARGET ORGAN(S):** Kidneys.

**ADDITIONAL INFORMATION:**

Chronic exposure may cause reproductive disorders and teratogenic effects. Vitamin D ingested in excess results in hypercalcemia, which is caused by excessive absorption of massive quantities of calcium by the intestine and enhanced bone resorption. Causes impairment of kidneys symptoms may include excessive thirst and urination, nocturia, proteinuria and decreased urinary concentration ability.

Reproductive and toxicity data listed in RTECS under KE1050000.

Only select RTECS information is provided here. Please see actual RTECS entry for complete information.

Oral Rat LD50 = 10 mg/kg (1986). Details of toxic effects not reported other than lethal dose value.

Reproductive: Specific developmental abnormalities - central nervous system, craniofacial and musculoskeletal system (1976).

Effects on embryo or fetus - fetotoxicity (except death, e.g., stunted fetus) (1980).

Fertility - abortion (1979).

Definitions: RTECS = Registry of Toxic Effects of Chemical Substances.

**ECOLOGICAL INFORMATION**

No information available.

**DISPOSAL CONSIDERATIONS**

Dispose of material in accordance with applicable local, state, and federal regulations.

**TRANSPORTATION INFORMATION**

US DOT / IATA: Toxic solid, organic, n.o.s. (Ergocalciferol), class 6.1, UN2811, PGII. Label: Toxic.

**REGULATORY INFORMATION**

RCRA - No applicable information.

SARA 302 - Extremely hazardous waste. TPQ = 1000/10000 lbs. RQ = 1000 lbs.

SARA 313 - This material is not reportable under Section 313.

EPA TSCA Section 8(b) - Chemical Inventory.

Exposure Limits - Not established.

California Proposition 65 - No applicable information.

This data sheet is based upon information believed to be reliable. The Company makes no statement or warranty as to the accuracy or completeness of the information contained herein which is offered for your consideration, investigation and verification. Any use of the information contained in this data sheet must be determined by the user to be in accordance with appropriate applicable regulations.