

## Vitamin D3

CAS Number: 67-97-0

Storage Temperature: Room temperature

### **Product Description :**

Appearance: White to white with a yellow cast powder

Molecular formula: C<sub>27</sub>H<sub>44</sub>O

Molecular Weight: 384.6

Vitamin D3 is the naturally occurring form of vitamin D3. Vitamin D3 mediates intestinal calcium absorption, bone metabolism, and probably muscle activity. It acts as a hormone precursor since it requires two stages of metabolism: first to 25-hydroxycholecalciferol; then to 1 $\alpha$ ,25-dihydroxycholecalciferol.

One unit (U.S.P. or international) is defined as the activity of 0.025  $\mu$ g of vitamin D3 contained in the U.S.P. vitamin D reference standard.

### **Storage/Stability:**

Cholecalciferol is stored unopened at 2-8 °C and protected from light, this product should be stable for a minimum of two to three years. Deterioration is negligible after storage of one year in amber-evacuated ampules at refrigerator temperatures. It is oxidized and inactivated by moist air within a few days.

### **Solubility / Solution Stability:**

Vitamin D3 is soluble at 50 mg/ml yielding a clear colorless solution. Soluble in ethanol, acetone, ether, chloroform; insoluble in water.

Practically insoluble in water: soluble in the usual organic solvents; slightly soluble in vegetable oils.

Solutions in propylene glycol or corn oil retain their potency over long periods of time at 40 °C.

Solutions in volatile solvents are unstable and should be used immediately

### **Precautions and Disclaimer :**

For Laboratory Use Only. Not for drug, household or other uses.