**Ergosterol**  
*Item No. 19850*

**CAS Registry No.**: 57-87-4  
**Formal Name**: (3β,22E)-ergosta-5,7,22-trien-3-ol  
**Synonym**: Provitamin D2  
**MF**: C_{28}H_{44}O  
**FW**: 396.7  
**Purity**: ≥85%  
**UV/Vis.**: λ_{max}: 271, 282, 293 nm  
**Supplied as**: A crystalline solid  
**Storage**: -20°C  
**Stability**: ≥2 years  
**Item Origin**: Plant/Bagasse fermentation

*Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.*

**Laboratory Procedures**

Ergosterol is supplied as a crystalline solid. A stock solution may be made by dissolving the ergosterol in the solvent of choice. Ergosterol is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of ergosterol in these solvents is approximately 0.5, 0.1, and 2 mg/ml, respectively.

Ergosterol is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, ergosterol should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. Ergosterol has a solubility of approximately 0.3 mg/ml in a 1:2 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

**Description**

Ergosterol is a sterol that is found predominantly in membranes of fungi. It is converted into vitamin D_2 (Item No. 11791) by ultraviolet light.\(^1\) Ergosterol and its biosynthetic pathway are significant targets for some fungicides.\(^2\)\(^-\)\(^4\)

**References**