1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: \( \text{C}_{27}\text{H}_{44}\text{O}_{3} \).

Batch Molecular Weight: 416.64

Physical Appearance: White solid

Solubility: Soluble in DMSO

Soluble in ethanol

Storage: Store at -20°C

2. ANALYTICAL DATA

HPLC: Shows 99.5% purity

Mass Spectrum: Consistent with structure
**Product Name:** Tacalcitol  
**Catalog No.:** 4157  
**Batch No.:** 2

**CAS Number:** 57333-96-7  
**IUPAC Name:** (1α,3β,5Z,7E,24R)-9,10-Secocholesta-5,7,10(19)-triene-1,3,24-triol

**Description:** Synthetic vitamin D₃ (Cat. No. 4156) analog. Promotes normal bone development by regulating calcium. Modulates immunological and inflammatory processes; induces nerve growth factor production in epidermal keratinocytes.

**Physical and Chemical Properties:**
- **Batch Molecular Formula:** C₂₃H₄₆O₃.
- **Batch Molecular Weight:** 416.64
- **Physical Appearance:** White solid

**Minimum Purity:** >98%

**Batch Molecular Structure:**

![Molecular Structure](image)

**Storage:** Store at -20°C. This product is packaged under an inert atmosphere.

**CAUTION** - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

**Solubility & Usage Info:**
- Soluble in DMSO
- Soluble in ethanol

This product is supplied as a lyophilized solid and may be very hard to visualize. Solutions should be made by adding solvent directly to the vial. The vial should then be vortexed vigorously to ensure the product has completely dissolved.

**Stability and Solubility Advice:**
Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

**SOLIDS:** Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

**SOLUTIONS:** We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

**References:**