Analytical procedures for Identification, Assay, Degradation products and UoC of cholecalciferol in 10 µg chewable tablets using HPLC.

Release and stability testing.

Cholecalciferol is a form of vitamin D, also called vitamin D3. Vitamin D helps your body absorb calcium. Calcium is one of the main building blocks of bone. A lack of vitamin D can lead to bone diseases such as osteoporosis or rickets. Vitamin D also has a role in your nerve, muscle, and immune systems.

Vitamin D3 is thus commonly consumed by humans to increase vitamin D levels and stringent quality control is applied before release to the market.

Vitas AM-002 is stability indication method that quantifies vitamin D from tablets/powder by HPLC-UV detection.

**Method details:**

- **Technique:** HPLC-UV
- **Sample Matrix:** Tablets, powder
- **Sample amount:** 10 tablets/1 g powder
- **Range:** 70-130% of label
- **Detection Limit:** 8 - 26 IU/g
- **Quantification limit:** 27 - 86 IU/g
- **Intra-day precision:** 0.21%
- **Inter-day precision:** 0.76%
- **Shipping temp:** Room temperature

Vitas is a Norwegian GMP certified chemical analysis contract lab, with 20 years experience in providing a high quality, custom chromatographic analytical service based on cutting-edge knowledge and technology.