
TEST METHOD OF VITAMIN B₁₂ 1% (UV)

1- Preparation of the solutions

A) Cyanocobalamin standard solution: Weigh accurately 20mg of cyanocobalamin into 1000ml volumetric flask, dissolve and dilute with distilled water to make the volume

B)

B) Sample solution of vitamin B₁₂ Feed additive: weigh accurately about 200mg of vitamin B₁₂ Feed additive into 100ml volumetric flask, diluted with distilled water to make the volume. After extraction of Cyanocobalamin a ultrasonic for about 20min., the solution is filtered with a membrane filter to make a sample solution.

2- Analysis Procedure: Determine the absorbance of both solution in 1-cm cells at the wavelength of maximum absorbance at about 361 ± 1 nm, with a suitable spectrophotometer, using water as the blank.

$$x1 (\%) = (C2 \times B \times A1 \times 100 / C1 \times A2 \times 1000) \times 100$$

X1..... Assay of Cyanocobalamin (%)

C1..... Weight of sample (on the dried basis)

C2..... Weight of standard (on the dried basis)

B..... Assay of standard (%)

A1..... Absorbance of the sample solution at about 361 nm

A2..... Absorbance of the standard solution at about 361 nm

100..... Dilution rate of batch sample

1000... Dilution rate of reference sample