Chemical Book

Technical Data Sheet

Vitamin B12

Compound Information

Product Name: Vitamin B12

CAS No.: 68-19-9

Molecular Formula: C63H88CoN14O14P

Molecular Weight: 1355.37

Storage: Store at 0 -8 °C

Revision Date: 2026-04-15

Analytical Information

Tests	Specifications
Appearance	Dark red crystalline powder
UV	Wavelength range: 200-700 nm. The absorption spectrum exhibits maxima at 278 ± 1, 361 ± 1, and 550 ± 2 nm. A361/A550nm = 3.15 -3.40. A361/A278= 1.70 -1.90
LOD	≤ 12%
Related Substances	7ß, 8ß-Lactocyanocobalamin : ≤ 1%. 50-carboxycyanocobalamin : ≤ 0.5%. 34-Methylcyanocobalamin : ≤ 2%. 32-Carboxycyanocobalamin : ≤ 1%. 8-Epi-cyanocobalamin : ≤ 1%. Any other unidentified impurity : ≤ 0.5%. Total impurities : ≤ 3%
Purity	96 - 102% (On dried basis)
Specification Reference	Meets USP specification
Additional Information	Identification B : A red or orange-red color appears immediately after the addition of nitroso R salt. The red color persists after boiling with the addition of hydro-chloric acid. Identification C: The retention of the major peak of the sample solution c
MS	Pass test
^{1}H NMR	Pass test
ESR	Pass test
IR	Pass test