



## Specification

### Vitamin B12 (Cyanocobalamin) USP

**Catalog Number:** CC1008  
**CAS Number:** 68-19-9  
**Molecular Formula:**  $C_{63}H_{88}CoN_{14}O_{14}P$   
**Molecular Weight:** 1355.57  
**Storage:** 15°C – 30°C, protect from light  
**Retest Period:** Four years from the date of manufacture

Test	Specification
Appearance	Dark red, crystalline powder/crystals
Assay	97.0 – 100.5%
Identification A	$A_{361}/A_{278} = 1.70 - 1.90$ $A_{361}/A_{550} = 3.15 - 3.40$
Identification B	Meets USP requirement
Identification C	Meets USP requirement
Moisture (LOD)	$\leq 10.0\%$
Related Substances	
Total Impurities	$\leq 3.0\%$
7b,8b-Lactocyanocobalamin	$\leq 1.0\%$
32-Carboxycyanocobalamin	$\leq 1.0\%$
8-Epi-cyanocobalamin	$\leq 1.0\%$
Any Other Impurity	$\leq 0.5\%$
Residual Solvent	Acetone $\leq 0.5\%$
Total Plate Count	$\leq 800\text{cfu/g}$
Yeast & Mold	$\leq 80\text{cfu/g}$
E. coli	Negative

Approved:

Date: February 26, 2018

John Grubb, PhD  
Gojira Fine Chemicals  
Quality Manager  
Tel: 440-252-5397, Fax: 888-211-5523  
[docsupport@gojiraafc.com](mailto:docsupport@gojiraafc.com)