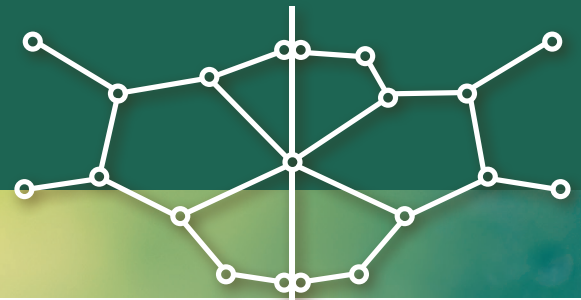




## VITAMIN B12 (CYANOCOBALAMIN)

**DESCRIPTION**

Our vitamin B12 (cyanocobalamin) is derived from a proprietary natural fermentation process. Its incredible consistency makes it ideal for use in the human health, animal nutrition and cosmetics industries. This product combines vitamin B12 with a nonsoluble calcium carbonate and silica carrier for optimized mixability and handling. Unlike most products on the market, there is no free cyanide in the finished product.

**COMPOSITION**

Vitamin B12 (cyanocobalamin)  $\geq 98\%$ : CAS N<sup>o</sup> [68-19-9].  
Other forms (0.1%, 1%, 5%, 10%), Carrier: (calcium carbonate, silica).

**SPECIFICATIONS**

|                                   |                                |
|-----------------------------------|--------------------------------|
| Appearance                        | Very fine, free-flowing powder |
| Color                             | Light pink to reddish brown    |
| Vitamin B12 content on dry matter | Min. 1% (10,000 mg/kg)         |
| Weight loss on drying (100°C-4h)  | Max. 4%                        |
| Chemical formula                  | $C_{63}H_{88}O_{14}N_{14}P Co$ |

**DURATION OF GUARANTEE**

Guaranteed against spoilage for 24 months from date of manufacture. Keep it in original, unopened packaging and store in a cool, dry place away from light.

**PHYSICAL AND CHEMICAL PROPERTIES\***

|                     |                               |
|---------------------|-------------------------------|
| >500 $\mu m$        | Approx. 1%                    |
| <160 $\mu m$        | Approx. 75%                   |
| Density non-tapped  | Approx. 1.0 g/cm <sup>3</sup> |
| Density tapped      | Approx. 1.6 g/cm <sup>3</sup> |
| Solubility in water | Insoluble                     |

\*These data which result from careful tests on representative samples, are provided for information purposes only and do not in any way constitute a guarantee.

**PACKAGING**

25 kilogram cardboard boxes (500 kgs pallet)

**STORAGE**

Airtight container, protected from light, dried.

**METHOD OF ANALYSIS**

Analytical method used for routine control of product conformity: internal method Z065 (HPLC).

**SAFETY**

The product Material Safety Data Sheet (MSDS) is available at [www.hq-biosciences.com](http://www.hq-biosciences.com). This product is compliant with FAMI-QS, ISO 9001, HACCP, FSSC 22000 and PAS 222 (Halal, Kosher, non-GMO).