

SPECIFICATION

Vitamin B12 (Methylcobalamin)

Production unit

Heilongjiang NHU Biotechnology

Description

Ingredients

Synonym

Methylcobalamin

Mecobalamin, Vitamin B 12,

Carbanide;cobalt(3+);[(2R,3S,4R,5S)-5-(5,6-

dimethylbenzimidazol-1-yl)-4-hydroxy-2-

(hydroxymethyl)oxolan-3-yl] [(2R)-1-[3-

[(2R,3R,4Z,7S,9Z,12S,13S,14Z,17S,18S,19R)-2,13,18-

tris(2-amino-2-oxoethyl)-7,12,17-tris(3-amino-3-

oxopropyl)-3,5,8,8,13,15,18,19-octamethyl-2,7,12,17-

tetrahydro-1H-corrin-21-id-3-yl]propanoylamino]

propan-2-yl] phosphate

Formula

C₆₃H₉₁CoN₁₃O₁₄P

Product code

SPJB01

CAS-No.

13422-55-4

Properties

Shelf life

36 months in unopened original packaging

Aspect

Dark red, crystalline powder or dark red crystals

Assay (on the dried basis)

98 – 102 %

Loss on drying

≤ 12 %

Solubility

sparingly soluble in water, slightly soluble in ethanol (99,5 %), practically insoluble in acetone, acetonitrile and ether

Clarity of solution

Clear and red color in water

Identification

Co positive reaction

UV Have maximum absorption at 267 ± 2 nm, 342 ± 2 nm and 522 ± 2 nm

IR The infrared light absorption map is consistent with the control map.

HPLC The retention time of the major peak of the sample solution corresponds to that of the standard solution, as obtained in the assay.

Heavy metals

Copper (Cu)	≤ 2,0 mg/kg
Arsenic (As)	≤ 0,5 mg/kg
Lead (Pb)	≤ 0,2 mg/kg
Mercury (Hg)	≤ 0,1 mg/kg
Cadmium (Cd)	≤ 0,3 mg/kg
Iron (Fe)	≤ 2,0 mg/kg

Microbiological specs

Total plate count	≤ 1000 CFU/g
Mould and Yeast	≤ 100 CFU/g
E. coli	negative in 10 g
Salmonella	negative in 25 g
Staph. aureus	negative in 25 g

Related substances

Each area of the peaks other than mecobalamin is not more than 0,5 % of the peak area of mecobalamin.

The total area of the peaks other than mecobalamin is not more than 2,0 % of the peak area of mecobalamin.

Handling

Usage for food industry

Storage

product is hygroscopic, see light easy to decompose
store in tight, light-resistant containers, room temperature

Transport instructions

please see our latest safety data sheet

NHU EUROPE GmbH

Vitamin B12 Methylcobalamin/SPJB01/erstelltundfreigegeben: 090123/av

Bank account EUR
Deutsche Bank AG
DE 53 2407 0075 0019 5222 00
DEUTDE2H240

Bank account USD
Deutsche Bank AG
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