

Product Information

Product Data Sheet

Vitamin B12 Crystalline

Description

Vitamin B12 Crystalline is a red to purplish-red, crystalline powder. It is highly hygroscopic and practically odourless, and begins to darken at about 200 °C without melting. It is produced by fermentation using a genetically modified micro-organism (GMM) under containment.

Product identification

Product code: 04 2915 5

Chemical name: 5,6-dimethylbenzimidazolcyanocobalamide

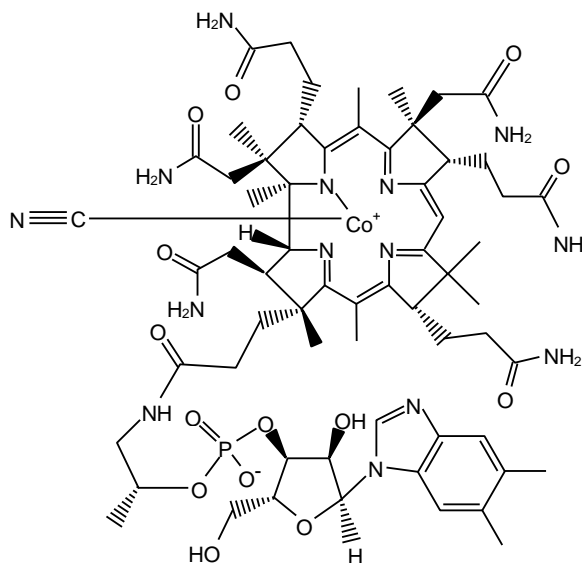
Synonyms: cyanocobalamin; cobalamin; vitamin B₁₂

CAS No.: 68-19-9

EINECS No.: 200-680-0

Empirical formula: C₆₃H₈₈CoN₁₄O₁₄P

Molecular mass: 1355.42 g/mol



Specifications

Appearance:	Red to purplish-red powder
Identity:	Corresponds
Loss on drying:	Max. 3.0%
Pseudo cyanocobalamin:	Passes test (USP)
Absorbance ratio:	
A₃₆₁/A₂₇₈ nm	1.70-1.90
A₃₆₁/A₅₅₀ nm	3.15-3.40
Assay:	96.0-100.5% (on dry material)

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Related substances: max. 3.0%

Residual Solvents:
Acetone max. 5000 ppm

Solubility

Vitamin B12 Crystalline is sparingly soluble in water, slightly soluble in alcohol, and insoluble in acetone, chloroform and ether.

Stability and storage

Vitamin B12 Crystalline is relatively stable to air and heat if protected from humidity, but is sensitive to light. The product may be stored for 60 months from the date of manufacture in the unopened original container and at a temperature below 25 °C. The 'best use before' date is printed on the label. Aqueous solutions are sensitive to alkalis, strong acids and light.

Uses

For dietary nutritional supplements and for solid and liquid pharmaceutical preparations.

This product is not intended for use in the manufacture of sterile drug products. The purchaser assumes all responsibility for additional processing, testing, labelling and registration required for such use.

Compendial compliance

Vitamin B12 Crystalline meets all requirements of the USP, FCC, JP and Ph. Eur. when tested according to these compendia.

Safety

This product is safe for the intended use. Avoid ingestion, inhalation of dust or direct contact by applying suitable protective measures and personal hygiene.

For full safety information and necessary precautions, please refer to the respective DSM Material Safety Data Sheet.

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Legal notice

The information given in this publication is based on our current knowledge and experience, and may be used at your discretion and risk. It does not relieve you from carrying out your own precautions and tests. We do not assume any liability in connection with your product or its use. You must comply with all applicable laws and regulations, and observe all third party rights.

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Additional information

To find out more about our ingredients, please contact your nearest DSM Nutritional Products office.

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