



CIANOCOBALAMINA (VITAMINA B12) (EUR. PH.)					
PRODUCT CODE: 1894		CAS Nº: 68-19-9	ANALYSIS Nº: 043/24		
MANUFACTURER BATCH:	C230402G		CERTIFICATE ID:	41.264	
SUPPLIER BATCH:			MANUFACTURING DATE:	03/04/2023	
МЕТАРН ВАТСН:	0300224		EXPIRY DATE:	02/04/2028	

ATTRIBUTES	SHOULD BE	IS
Appearance	Dark red, crystalline powder or dark red crystals, anhydrous substance very hygroscopic	Dark red crystalline powder, anhydrous substance very
Solubility	Sparingly soluble in water and in ethanol (96 %), practically insoluble in acetone	hygroscopic
Absorption maxima	Complies	Complies
Ratio Abs (361/547-559)	3.15 - 3.45	3.28
Ratio Abs (361/278)	1.70 - 1.90	1.85
Identification B	Complies	Complies
Related substances		
Impurity C	=< 1.5 %	< 0.10 %
Impurity A	=< 0.7 %	< 0.10 %
Impurity B	=< 0.5 %	Not Detected
Impurity D	=< 0.5 %	Not Detected
Impurity E	=< 0.5 %	0.4 %
Impurity F	=< 0.5 %	< 0.10 %
Unspecified impurities	=< 0.2 %	< 0.10 %
Total of impurities	=< 3.0 %	0.4 %
Loss on drying	=< 12.0 %	5.9 %
Assay	96.0 - 102.0 %	99.6 %

COMPLIES WITH

European Pharmacopoeia 11.0

REMARKS

Cyanocobalamin is subjected to the requirements of the ICH Q3D "Elemental Impurities" guideline and the requirements of quides EMA/CHMP/ICH/82260/2006.

All data controlled by Metapharmaceutical Industrial SL.

Absence of N-nitrosamines impurities has been ensured after a risk evaluation according to ICH Q9, ICH M7 and in accordance with guidelines EMA/428592/2019 Rev 2 and EMA/189634/2019.

 $Certificates \ of \ residual \ solvents, \ allergens, \ non-GMO \ and \ BSE-TSE, \ among \ others, \ are \ available \ upon \ request.$

All methods of analysis are validated by official pharmacopoeias or are validated by internal methods of the manufacturer, which can be obtained at specific request. The above information does not exempt from the obligation to identify the product before use.

STORAGE

Keep tightly closed, in a dry and cool place and protected from the light.

Analysis date: 17/04/2024

Signature: Albert Sánchez López (QP)

Conclusion: Complies

Original certificate available upon request

Manufacturer: 40000943

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Page 1 of 1

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