

CERTIFICATE OF ANALYSIS

Test	Specification	Reference Method	Results
Appearance	Clear, pale yellow oil solution	Visual	Clear, pale yellow oil solution
Identification	To match MK-7 reference standard profile	HPLC/USP38-NF33 MK-7 Preparation	Conforms
Total all-trans vitamin K2 MK-7	>5.00 %	HPLC/USP38-NF33 MK-7 preparation	5.12 %
Lead (Pb)	<3.0 µg/g	ICP-MS/ICP-OES, USP 233 or equivalent	<0.02 µg/g
Cadmium (Cd)	<1.0 µg/g	ICP-MS/ICP-OES, USP 233 or equivalent	<0.004 µg/g
Mercury (Hg)	<0.1 µg/g	ICP-MS/ICP-OES, USP 233 or equivalent	<0.01 µg/g
Arsenic (As)	<2.0 µg/g	ICP-MS/ICP-OES, USP 233 or equivalent	<0.01 µg/g
Total plate count	<10 ³ cfu/g	USP 2021/Ph. Eur. 2.6.12 or equivalent	<10 cfu/g
Total Moulds and yeasts	<10 ² cfu/g	USP 2021/Ph. Eur. 2.6.12 or equivalent	<10 cfu/g
<i>E. coli</i>	Absent in 1 g	USP 2022/Ph. Eur. 2.6.13 or equivalent	Absent in 1 g
<i>Staphylococcus aureus</i>	Absent in 1 g	USP 2022/Ph. Eur. 2.6.13 or equivalent	Absent in 1 g
<i>Salmonella sp.</i>	Absent in 10 g	USP 2022/Ph. Eur. 2.6.13 or equivalent	Absent in 10 g
Bile-tolerant gram-negative bacteria*	≤10 ² cfu/g	USP <62> or equivalent	<10 cfu/g

*includes members of the family Enterobacteriaceae, Pseudomonads and Aeromonas

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25.04.2019

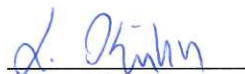
Konformitätsbescheinigung

Firma: Sunday Natural Products GmbH
Potsdamer Str. 81c, 10785 Berlin

Produkt: Vitamin D3 + K2 MK7 2500 IE + 100µg all trans 300 Tropfen VEGAN
(SKU 3945)
Batch Nr. L02925
Prüfbericht **19014441-004**

Der auf der Flasche angegebene Gesamtgehalt an Vitamin D3 wird ausweislich des Ergebnisses der durchgeführten Untersuchung im Rahmen der Messunsicherheit der Methodik zum Zeitpunkt der Analyse eingehalten.

Hamburg, den 25.04.2019



i. A. L. Kühn
(Staatl. gepr. Lebensmittelchemiker / Kundenbetreuung)

Certificate of Analysis

Details: Plant-source Vitamin D3 (Cholecalciferol) 1,000,000iu/g Oil.
Suitable for Vegetarians: Yes
Suitable for Vegans: Yes

Test	Specification	Result
Appearance:	Transparent oily liquid	Conforms
Colour:	Yellow	Conforms
Odour:	Characteristic	Conforms
Identification:	Positive	Conforms
Peroxide Value:	< 10 Meq/kg	1.3 Meq/Kg
Assay:	900,000 iu/g – 1,100,000 iu/g	1,005,245iu /g
Heavy Metals:	Max. 3 ppm	0.1 ppm
Lead (Pb):	Max. 0.5 ppm	0.01 ppm
Cadmium (Cd):	Max. 0.1 ppm	0.01 ppm
Arsenic (As):	Max. 0.5 ppm	0.01 ppm
Mercury (Hg):	Max. 0.1 ppm	<0.01 ppm
Chromium (Cr):	Max. 0.1 ppm	<0.01 ppm
Total Viable Count (TVC):	Max.3,000 cfu/g	<10cfu/g
Yeasts & moulds:	Max. 300 cfu/g	<10cfu/g
E.Coli:	Negative	Conforms
Salmonella:	Negative	Conforms
Staphylococcus Aureus:	Negative	Conforms
Coliforms:	Negative	Conforms
GMO Status:	Non-GMO	Non-GMO
Irradiation Status:	Non-irradiated	Non-irradiated
TSE/BSE Status:	TSE/BSE free	TSE/BSE free

CoA K2 content in Sunday- Vitamin K2 drops

Objective: Analysis of K2 (all-*trans* MK-7) content and isomeric purity

Date of analysis: 25.03.2019

Analysis Method: USP41 Menaquinone-7; Content of Menaquinone-7 Method2
 The amount of K2 (MK-7) in the material is determined by HPLC (qualified instrument Agilent 1260), with UV detection at 268 nm, using external standard calibration method. MK-7 is released from the matrix by adding THF and EtOH to the product (drops).

USP41 Menaquinone-7; Isomeric purity
 Determination of MK-7 isomeric purity by HPLC. The all-*trans* MK-7 isomer is quantified as % area of the total MK-7 peak area in the chromatogram.

Sample/Result:

Sample		
Marketer	Sunday	
Product name	Vitamin D3 + K2 MK7 2500 IE + 100µg all trans 300 Tropfen VEGAN	
Batch no.	3945 (L02925)	
Analysis	Label claim K2 (all- <i>trans</i> MK-7/item)	Result
K2 (all- <i>trans</i> MK-7) content	100 µg/drop	Complies

Drop weight of 28 mg/drop used in the calculation (provided by manufacturer)

The investigation has shown that the product Vitamin D3 + K2 MK7 2500 IE + 100µg all trans 300 Tropfen VEGAN/batch 3945 (L02925), with respect to content of vitamin K2 MK-7 all-*trans*, meets the product specifications given on the label.

Prepared by:

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 Solveig Nordstrand/08.05.2019
 Senior Research Scientist