

## Certificate of Analysis

<b>Product Name:</b>	<b>D<sub>3</sub> 1.0 miu/gm MCT Oil</b>
----------------------	---

TEST	METHOD	STANDARD	RESULT
<b>Assay</b> Vitamin D <sub>3</sub> , IU/gm	J. Chromatogr. A870(2000)207-15 & Dionex Tech Note 89	1,000,000	1,080,000
<b>Acid Value</b> Mg KOH/gm	AOCS Ca 5a-40 AOAC 983.23	<2.0	1.06
<b>Micro</b>			
Aerobic Plate Count, cfu/g	USP<2021>	<1,000	<10
Coliforms, cfu/g	USP<2021>	<100	<10
Yeasts & molds, cfu/g	USP<2021>	<100	<10
E. coli, cfu/g	USP<2022>	Negative (<10)	ABSENT
Staphylococcus aureus, cfu/g	USP<2022>	Negative (<10)	ABSENT
Salmonella, cfu/g	USP<2022>	Negative	ABSENT
<b>Heavy Metals</b>			
Arsenic, ppm	AOAC 993.14	<1.5	ND
Cadmium, ppm	AOAC 993.14	<0.3	ND
Lead, ppm	AOAC 993.14	<1.0	ND
Mercury, ppm	DMA	<0.2	0.001

\* Indicates an estimate due to low plate counts

# CERTIFICATE OF ANALYSIS

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

\*includes members of the family Enterobacteriaceae, Pseudomonads and Aeromonas

GBA Gesellschaft für Bioanalytik mbH · Goldtschmidtstr. 5 · 21073 Hamburg

Sunday Natural Products GmbH  
Potsdamer Str. 81c, Gebäude H  
10785 Berlin



Ihr Ansprechpartner:  
Lennart Kühn  
Tel. +49 (0)40 797172-787  
L.Kuehn@gba-group.de

16.04.2019

## Konformitätsbescheinigung

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

**Produkt:** Vitamin D3 + K2 MK7 2500 IE + 100µg all trans 300 Tropfen (SKU 3944)  
Batch Nr. L02901  
Prüfbericht **19014441-005b** ersetzt **19014441-005**

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 16.04.2019



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

## 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	
Batch no.	3944 (L02901)	
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/batch 3944 (L02901), with respect to content of vitamin K2 MK-7 all-*trans*, meets the product specifications given on the label.**

Prepared by:

.....  
 Solveig Nordstrand/08.05.2019  
 Senior Research Scientist