Certificate of Analysis

Product Name:	D_3 1.0 miu/gm MCT Oil

TEST	METHOD	STANDARD	RESULT
Assay			
Vitamin D_3, IU/gm	J. Chromatogr. A870(2000)207-15 & Dionex Tech Note 89	1,000,000	1,080,000
Acid Value			
Mg KOH/gm	AOCS Ca 5a-40 AOAC 983.23	≤2.0	1.06
Micro			
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
Heavy Metals			
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
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
E. coli	Absent in 1 g	USP 2022/Ph. Eur. 2.6.13 or equivalent	Absent in 1 g
Staphylococcus aureus	Absent in 1 g	USP 2022/Ph. Eur. 2.6.13 or equivalent	Absent in 1 g
Salmonella sp.	Absent in 10 g	USP 2022/Ph. Eur. 2.6.13 or equivalent	Absent in 10 g
Bile-tolerant gram-negative bacteria*	$\leq 10^2$ cfu/g	USP <62> or equivalent	<10 cfu/g

*includes members of the family Enterobacteriaceae, Pseudomonads and Aeromonas