

# GOVERNMENT CHEMIST LABORATORY AUTHORITY



GCLA 02

## CERTIFICATE OF ANALYSIS

### A: Details of the sample submitted to the Authority

1	Lab No. HQ025 – 00847	2	Date of issue: 06/06/2025	3	GCLA Ref: 217/A3/VOL.13/02
4	Description of sample(s)/mark: One (01) sample of Seamoss powder				
5	Date of submission: 20/05/2025	6	Client Ref. No :		
7	Date of analysis: 22/05/2025 – 05/06/2025				
8	Sample submitted by: Abbas Mrope				
9	Customer's Address: Nyamuzi Traders Limited, P.O. Box 65147, Kigamboni-Dar es Salaam.				
10	Analysis requested: Phytochemical, Heavy metals, Iodine, Fatty acid, Crude fibre, Total fat, Protein, Carbohydrate and Energy.				

### B: Laboratory Results

The sample was analysed as per specified test method(s) and the given results pertain only to the sample submitted to the Authority for testing as summarized in Table 1.

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Report as Released by  
 Chief Government Chemist  
 cgc@gcla.go.tz

*Note: The certificate has been issued without any alteration and should not be reproduced, except with a prior written approval of the Chief Government Chemist and shall not be transferable*

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**Table 1: Detailed Analytical Results**

No.	Sample ID	Parameter	Result(s)	Method(s)	
1.	Seamoss powder	Crude fibre %,(m/m)	7.29	Fibretherm	
2.		Total Fat %,(m/m)	0.69	Soxtherm	
3.		Phytochemicals	Palmitamide	Not detected	LC - MS/MS and GC-MS/MS
			Oleamide		
			Neophytadiene		
4.		Fatty acids	Not detected		
5.		Pigments	Not detected		
6.		Iodine(mg/g)	5.46		Titrimetric
7.		<b>Metals</b>			
		Mercury (ppm)	Not detected		AAS
		Chromium (ppm)	Not detected		ICP-OES
		Cadmium (ppm)	Not detected		
		Arsenic (ppm)	Not detected		
	Lead (ppm)	Not detected			
	Zinc (ppm)	Not detected			
	Copper (ppm)	Not detected			
	Calcium (ppm)	2913.88			
	Iron (ppm)	112.37			
Potassium (ppm)	109712.94				
Magnesium (ppm)	13456.55				
Sodium (ppm)	41918.99				

		
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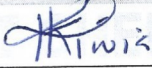

Lab No. HQ025 – 00847

**Note:** Protein, Carbohydrate and Energy were not done due to unforeseen technical circumstances.

**NB:**

1. LC- MS/MS – Liquid Chromatography - Mass Spectrometry
2. GC- MS/MS – Gas Chromatography - Mass Spectrometry
3. Detection Limit was 0.001 ppm for As,Cd,Cr,Mg and Zn
4. Detection Limit was 0.01 ppm for Na,K,Fe and Cu
5. Detection Limit was 0.005 ppm for Pb
6. Detection Limit was 0.26 ppb for Hg
7. ICP-OES -Inductively Coupled Plasma- Optical Emission Spectrometer
8. AAS- Atomic Absorption Spectroscopy

**END OF REPORT**

<b>Analyst:</b>	<b>Verified by:</b>	<b>Approved by:</b>
		
Reuben M. Sengelema Chemist I	Lulu H. Kiwia Ag.Manager- Food and Drugs Laboratory	Emmanuel N. Gwae Ag. Director - Products and Environmental Analysis Directorate

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HQ.F.05