

CERTIFICATE OF TESTING

Product Name	Cannabigerolic acid, 98 %
Product Code	SN39I
Batch Number	SN39I220702
CAS Number	25555-57-1
Molecular formula	C ₂₁ H ₂₆ O ₂
Molecular Weight	360.5 g/mol
Date of Analysis	11/08/2022
Date of Manufacture	29/07/2022
Storage conditions	-20 °C ± 5 °C, store in a cool, dry place, away from light and air
Expiry (re-test) date	07/2023

ASSAY	ACCEPTANCE CRITERIA	LOQ	RESULT
Appearance	White to yellowish	N/A	Yellowish
Appearance (form at RT)	Powder	N/A	Conforms
Proton NMR spectrum	Conforms to structure	N/A	Conforms
Cannabinoids (HPLC, 228 nm)			
- CBC	N/A	0.17 %	ND
- CBD	N/A	0.17 %	ND
- CBDA	N/A	0.17 %	0.25 %
- CBGA	≥ 98.00 %	0.17 %	98.24 %
- CBDV	N/A	0.17 %	ND
- CBG	N/A	0.17 %	1.39 %
- CBN	N/A	0.17 %	ND
- THCV	N/A	0.17 %	ND
Cannabinoids (LC-MS)			
- Δ ⁸ -THC	< 0.05 %	0.0025 %	ND
- Δ ⁹ -THC	< 0.05 %	0.00025 %	ND
Residual solvents ¹			
- ∑ Acetone, 1-butanol, 2-butanol, butyl acetate, ethanol, ethyl acetate, ethyl ether, ethyl methyl ketone, heptane, methyl acetate, pentane, propan-2-ol, propyl alcohol	≤ 5000 ppm	1 ppm	< 1 ppm
- Cyclohexane	≤ 3880 ppm	1.0 ppm	< 1 ppm
- Dichloromethane	≤ 600 ppm	0.1 ppm	< 0.1 ppm



- Methanol	≤ 3000 ppm	1 ppm	< 1 ppm
- n-Hexane	≤ 290 ppm	1 ppm	13.7 ppm
Heavy metals ¹			
- Arsenic (As)	< 0.1 ppm	0.04 ppm	< 0.04 ppm
- Cadmium (Cd)	< 0.1 ppm	0.01 ppm	< 0.01 ppm
- Lead (Pb)	< 0.1 ppm	0.02 ppm	< 0.02 ppm
- Mercury (Hg)	< 0.01 ppm	0.01 ppm	< 0.01 ppm
Microbiology ¹			
- TAMC	≤ 2000 CFU/g	10 CFU/g	25 CFU/g
- TYMC	≤ 200 CFU/g	10 CFU/g	< 10 CFU/g
- Bile-tolerant gram-negative bacteria	Absent	Detected / Not detected	Absent
- <i>Escherichia coli</i>	Absent	Detected / Not detected	Absent
- <i>Salmonella</i> spp.	Absent	Detected / Not detected	Absent

¹Performed in ISO 17025 certified contract testing laboratory

N/A – Not Applicable

ND – Not Detected

Approved by:



Quality Control Specialist

2022-08-12

Date, signature

Head of Quality

2022-08-12

Date, signature

SPECIFICATION

Name of material	Cannabigerolic acid, CBGA
Product ID / SKU	SN39I
Origin	Synthetic
Purity	≥ 98 %
CAS	25555-57-1
Appearance	Solid
Solubility	Not soluble in water. Soluble in oils and organic solvents
Color	White to yellowish
Long-term storage	-20 ± 5 °C, store in a cool, dry place, away from light and air
Packaging	HDPE container, aluminium container
Shelf life	12 months after production, in unopened original packaging maintained under correct storage conditions.

Material image reference



	ANALYSIS	ACCEPTANCE CRITERIA
Cannabinoid profile (HPLC at 228 nm and LCMS)	Cannabigerolic acid, CBGA	≥ 98.0 %
	delta-8-Tetrahydrocannabinol, Δ8-THC	≤ 0.05 %
	delta-9-Tetrahydrocannabinol, Δ9-THC	≤ 0.05 %
Proton NMR spectrum	Proton NMR spectrum	Conforms
Residual Solvents	∑ Acetone, 1-butanol, 2-butanol, butyl acetate, diethyl ether, ethanol, ethyl acetate, ethyl methyl ketone, methyl acetate, pentane, propan-2-ol, 1-propanol, heptane	≤ 5000 ppm
	Cyclohexane	≤ 3880 ppm
	Methanol	≤ 3000 ppm
	Dichloromethane	≤ 600 ppm
	n-hexane	≤ 290 ppm
Heavy metals	Arsenic (As)	< 0.1 ppm
	Cadmium (Cd)	< 0.1 ppm
	Lead (Pb)	< 0.1 ppm
	Mercury (Hg)	< 0.01 ppm
Microbiology	Total aerobic microbial count (TAMC)	≤ 2000 CFU/g
	Total yeast/mold count (TYMC)	≤ 200 CFU/g
	Bile-tolerant gram-negative bacteria	Absent/1g
	<i>Candida albicans</i>	Absent/1g
	<i>Pseudomonas aeruginosa</i>	Absent/1g
	<i>Staphylococcus aureus</i>	Absent/1g
	<i>Salmonella</i> spp.	Absent/25g
<i>Escherichia coli</i>	Absent/ 1 g	



	ANALYSIS	ACCEPTANCE CRITERIA
Pesticides (N=648)	Pesticide residues	< 0.01 mg/kg
Dioxins	Dioxins	≤ 0,75 pg/g
	Sum of dlPCBs	≤ 1,25 pg/g
	Sum of PCB28, 52, 101, 138, 153, 180	≤ 60 ng/g
PAH4	Chrysene	< 10 µg/kg
	Benzo(a)anthracene	< 10 µg/kg
	Benzo(b)fluorathene	< 10 µg/kg
	Benzo(a)pyrene	< 10 µg/kg

