



Łukasiewicz

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Puławy, 29.06.2022

ANALYSIS REPORT No 181/2022/2

1.	Name of sample: (information provided by the client)	Hemp extraction residue, batch No. 2205
2.	Client's name and address:	A-Sense Sp. z o.o. Ignacego Mościckiego 1 24-110 Puławy
3.	Sampling	Sampling date: 24.06.2022 Sampling by: Mariusz Chmiel Protocol No. 9/2022
4.	Sample delivery date:	24.06.2022
	Analysis beginning date:	24.06.2022
	Analysis termination date:	29.06.2022
5.	Sample description and identification:	Hemp extraction residue sample. Solid sample, in the form of a green mixture of dust and granules. The sample was delivered for analysis in the plastic bag. The sample has been given an identification number 181/2022/2.
6.	Sample marking / additional information (information provided by the client)	
7.	The usefulness of the test sample:	satisfactory
8.	Analysis methods:	

No.	Analyzed property	Analysis method	Procedure
1.	Moisture content	weight method	PB-R 73 Edition II, 18.01.2021
2.	Total oil content	ASE extraction method	PB-R 21 Edition II, 21.10.2021
3.	Cannabinoids content: CBDA (cannabidiolic acid), CBD (cannabidiol), Δ-9-THC (delta-9-tetrahydrocannabinol), THCA (delta-9-tetrahydrocannabinolic acid),	High Performance Liquid Chromatography with detection on a photodiode array detector (HPLC with DAD)	PB-R 51 Edition IV, 26.11.2021

9.	Analysis range in accordance:	with order No. USK.O.32.K2205
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10. Analysis results:

No.	Identification number	181/2022/2	
	Sample marking by the Client	Hemp extraction residue, batch No. 2205	
	Analyzed property	[unit]	Analysis results $y \pm U^{1)}$
1.	Content of moisture	% w/w	7,35
2.	Content of total oil	% w/w	3,16
3.	Cannabinoids content:		
	Content of CBDA (cannabidiolic acid),	% w/w	0,724±0,035
	Content of CBD (cannabidiol),	% w/w	0,074±0,004
	Content of Δ-9-THC (delta-9-tetrahydrocannabinol)	% w/w	< L.O.Q.
	THCA (delta-9-tetrahydrocannabinolic acid)	% w/w	0,016±0,002
	Total THC	% w/w	0,014±0,002
	Total THC per dry matter	% w/w / dry matter	0,015

$$\Sigma\text{THC} = \text{THC} + (0,8772 \times \text{THCA})$$

L.O.Q. = 0,008 % w/w (limit of quantification)

L.O.D. = 0,006 % w/w (limit of detection)

¹⁾ - the given extended uncertainty (U) is based on standard uncertainty multiplied by extension factor $k=2$ providing confidence level of 95%. Sampling uncertainty was not taken into account in calculations.

11. We declare:

- that the above results refer only to the analysed sample of identification number 181/2022/2
- that the „Analysis report” cannot be copied without written consent of the Laboratory Head not otherwise as a whole
- that the laboratory is not responsible for the information provided by the customer

12. The orderer has 14 days to submit a claim.

13. Notes: No

Person authorizing the analyses

29.06.2022r. Barbara Hanzel
.....
date and signature

END

The Laboratory Head

Laboratorium Analityczne
KIEROWNIK
.....
Seksja Surowców.....
i Przetwórczych

mgr Mariusz Chmiel

29.06.2022