

**Łukasiewicz**Instytut Nowych Syntez  
Chemicznychal. Tysiąclecia Państwa Polskiego 13a  
24-110 Puławy  
www.ins.pulawy.pl**LABORATORIUM BADAWCZE**tel.: +48 81 473 14 38  
fax: +48 81 473 14 31  
email: anna.watros@ins.pulawy.pl

Puławy, 29.06.2022

**ANALYSIS REPORT No 181/2022/3**

1.	Name of sample: (information provided by the client)	Hemp CO <sub>2</sub> extract, No. batch: 2205 PH-2
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. 10/2022
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 extract sample. The sample was delivered for analysis in a plastic bottle. The sample has been given an identification number 181/2022/3.
6.	Sample marking / additional information (information provided by the client)	
7.	The usefulness of the test sample:	<b>satisfactory</b>
8.	Analysis methods:	

No.	Analyzed property	Analysis method	Procedure
1.	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
----	-------------------------------	-------------------------------

10.	Analysis results:	
-----	-------------------	--

No.	Identification number		181/2022/3
	Sample marking by the Client		Hemp CO <sub>2</sub> extract, No. batch: 2205 PH-2
	Analyzed property	[unit]	Analysis results y ± U <sup>1)</sup>
1.	Cannabinoids content:		
	Content of CBDA (cannabidiolic acid),	% w/w	24,118±1,458
	Content of CBD (cannabidiol),	% w/w	7,357±0,337
	Content of Δ-9-THC (delta-9-tetrahydrocannabinol)	% w/w	0,428±0,026
	THCA (delta-9-tetrahydrocannabinolic acid)	% w/w	0,484±0,032
	Total THC	% w/w	0,853±0,077

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

L.O.Q. = 0,150 % w/w (limit of quantification)

L.O.D. = 0,107 % w/w (limit of detection)

<sup>1)</sup> - 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.	<b>We declare:</b> <ul style="list-style-type: none"><li>that the above results refer only to the analysed sample of identification number 181/2022/3</li><li>that the „Analysis report” cannot be copied without written consent of the Laboratory Head not otherwise as a whole</li><li>that the laboratory is not responsible for the information provided by the customer</li></ul>
12.	The orderer has 14 days to submit a claim.
13.	Notes: No

**Person authorizing the analyses**

29.06.2022r. Barbara Mazurek

.....  
date and signature

END

**The Laboratory Head**

Laboratorium Analityczne  
KIEROWNIK  
Sekcja Surowców  
i Produktów Roślinnych

.....  
date and signature

mgr Mariusz Chmiel  
29.06.2022