 Analyses for industry and science	Al. Zwycięstwa 96/98; 81-451 Gdynia	<b>Report number:</b>	
	office@spark-lab.pl <a href="http://www.spark-lab.pl">www.spark-lab.pl</a> ; +48 782 811 350 NIP: 586 228 03 65	2021/07/0021/002/EN/B	

## ANALYSIS REPORT

Particulars of the Client	Description	Order number
Xtract GmbH Friedrichstraße 171 10117 Berlin	Quantitative determination of heavy metals and residual solvents in CBD isolate. Quantitative determination of yeast and mould. Quantitative determination and detection of aerobic mesophilic bacteria.	ZO 2021/07/000011

The analyses have been conducted by:  
Laboratorium Analiz Chemicznych Spark-Lab Sp. z o.o.  
Research and Development Dept.

Date of commencement of analyses	27.07.2021
Date of completion of the analyses	05.08.2021

## Sample identification:

Sample signature	Sample designation	Sample collection method	Additional information	
			2021/07/0021/002	CBD
			Object of analysis:	white powder
			Sample evaluation:	good

## Results:

## 1. Results of microbiological determination.

Sample signature	Subject of determination	Method identification*	The result of the analysis	Limit value according to the PN-EN ISO 17516:2014-11	Unit
2021/07/0021/002	Enumeration of yeast and mould	PN-EN ISO 16212, NAS	< 10	$\leq 1 \times 10^3$	cfu/g**
	Enumeration and detection of aerobic mesophilic bacteria	PN-EN ISO 21149, NAS	< 10		

## 2. Results of the heavy metals determination.

Sample signature	Subject of determination	Method identification*	The result of the analysis	Standard Deviation	Unit
2021/07/0021/002	Content of cadmium <b>Cd</b>	SL/2020/006, NA	< 10	-	µg/g
	Content of arsenic <b>As</b>		< 10	-	
	Content of lead <b>Pb</b>		< 10	-	
	Content of mercury <b>Hg</b>		< 10	-	


## ANALYSIS REPORT

### 3. Results of residual solvents determination.

Sample signature	Subject of determination	Method identification*	The result of the analysis	Uncertainty	Unit
2021/07/0021/002	Ethanol	SL/2020/020, NA	0,026	0,004	%
	Diethyl ether		< 0,010	-	
	2,2-Dimethylbutane		< 0,010	-	
	Acetone		< 0,010	-	
	Isopropyl alcohol		0,003	0,001	
	Acetonitrile		< 0,002	-	
	Methylene chloride		< 0,010	-	
	3-Methylpentane		< 0,010	-	
	<i>n</i> -Hexane		< 0,010	-	
	1-Propanol		< 0,010	-	
	2-Butanone		< 0,002	-	
	Ethyl acetate		< 0,010	-	
	Tetrahydrofuran		< 0,002	-	
	Cyclohexane		< 0,010	-	
	1,2-Dimethoxyethane		< 0,002	-	
	Benzene		< 0,002	-	
	Isopropyl acetate		< 0,002	-	
	Heptane		0,031	0,005	
	1-Butanol		< 0,002	-	
	1,4-Dioxane		< 0,002	-	
	2-Ethoxyethanol		< 0,002	-	
	Toluene		< 0,002	-	
	1-Pentanol		< 0,002	-	
	<i>N,N</i> -Dimethylformamide		< 0,010	-	
	Ethylbenzene		< 0,002	-	
	<i>m</i> -, <i>p</i> -xylens		< 0,002	-	
<i>o</i> -xylene	< 0,010	-			
Isopropylbenzene	< 0,002	-			
Dimethyl sulfoxide	< 0,010	-			
Dimethylacetamide	< 0,010	-			

\* Determination method: A-accredited, NA-non-accredited, AS-by accredited subcontractor, NAS-not accredited by the subcontractor.

\*\*colony-forming unit per gram

 <p>Analyses for industry and science</p>	Al. Zwycięstwa 96/98; 81-451 Gdynia office@spark-lab.pl <a href="http://www.spark-lab.pl">www.spark-lab.pl</a> ; +48 782 811 350 NIP: 586 228 03 65	<b>Report number:</b> 2021/07/0021/002/EN/B	
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## ANALYSIS REPORT

<p><b>Approved of the results and report</b></p>		
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## END OF REPORT

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