

Certificate of Analysis- Pure Analytics InfoTest™

Customer Name: *Kase Farma*
Sample Name: *CBD Iso 1*
Sample Batch I.D.: *1.1*
Lab Sample I.D.: *KAS0006-1*
Sample Type: *Isolate*
Date Received: *1/7/2021*
Date Tested: *1/7-1/15/2021*
Date Reported: *1/15/2021*
QC Batch(es): *PA16814,832,834,838,840,842,847*
Tests Performed: *Cannabinoids, Micro (S,E,A), Pesticides, RSA, Filth & Foreign Material Inspection, Mycotoxins, Heavy Metals*

Item	Report Status
Cannabinoids	NA
Pesticides	PASS
Residual Solvent	PASS
Moisture	NT
Microbiology	PASS
Water Activity	NT
Filth & Foreign	PASS
Mycotoxins	PASS
Heavy Metals	PASS
Terpenes	NT

Cannabinoid Analysis:

THC	THCA	d-8 THC	CBD	CBDA	CBN	CBC	CBGA	CBG	CBGA	CBL	THCV	THCVA	CBDV	CBDVA	Total THC*	Total CBD**	Total
% wt.	% wt.	% wt.	% wt.	% wt.	% wt.	% wt.	% wt.	% wt.	% wt.	% wt.	% wt.	% wt.	% wt.	% wt.	% wt.	% wt.	% wt.
ND	ND	ND	99.09%	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	99.09%	99.09%
mg/g	mg/g	mg/g	mg/g	mg/g	mg/g	mg/g	mg/g	mg/g	mg/g	mg/g	mg/g	mg/g	mg/g	mg/g	mg/g	mg/g	mg/g
ND	ND	ND	990.91	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	990.91	990.91
mg/mL	mg/mL	mg/mL	mg/mL	mg/mL	mg/mL	mg/mL	mg/mL	mg/mL	mg/mL	mg/mL	mg/mL	mg/mL	mg/mL	mg/mL	mg/mL	mg/mL	mg/mL
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Flowers Reported on % DRY WT. Basis; *Total THC=(THCA * 0.877) + THC + d-8 THC; **Total CBD=(CBDA * 0.877) + CBD
 Method: Extraction by Methanol, IPA, Acetonitrile or Ethanol with sonication and HPLC-DAD confirmation analysis as needed by GC-FID analysis

Residual Solvent:

Method: Full Evaporation Technique by GC-MS

CA CATEGORY 1

Compound	(ug/g)	Inhal. Action Lim. (ug/g)	Other Action Lim. (ug/g)	PASS/FAIL	LOQ (ug/g)	LOD (ug/g)	NOTES:
1,2-Dichloroethane	ND	1.0	1.0	PASS	1.00	0.80	
Benzene	ND	1.0	1.0	PASS	1.00	0.20	
Chloroform	ND	1.0	1.0	PASS	1.00	0.20	
Ethylene Oxide	ND	1.0	1.0	PASS	1.00	0.80	
Methylene chloride	ND	1.0	1.0	PASS	1.00	0.80	
Trichloroethylene	ND	1.0	1.0	PASS	1.00	0.20	

CA CATEGORY 2

Compound	(ug/g)	Inhal. Action Lim. (ug/g)	Other Action Lim. (ug/g)	PASS/FAIL	LOQ (ug/g)	LOD (ug/g)	NOTES:
n-Butane	ND	5000	5000	PASS	2.0	0.50	
n-Pentane	397.3	5000	5000	PASS	2.0	0.50	
Acetone	10.4	5000	5000	PASS	2.0	0.50	
Ethanol	13.4	5000	5000	PASS	2.0	0.50	
n-Hexane	ND	290	290	PASS	2.0	0.50	
Methanol	3.5	3000	3000	PASS	2.0	0.50	
2-Propanol	ND	5000	5000	PASS	2.0	0.50	
Acetonitrile	ND	410	410	PASS	5.0	1.00	
Ethyl acetate	ND	5000	5000	PASS	2.0	0.50	
n-Heptane	ND	5000	5000	PASS	2.0	0.50	
Ether	<LOQ	5000	5000	PASS	2.0	0.50	
Toluene	ND	890	890	PASS	2.0	0.50	
Total xylenes	ND	2170	2170	PASS	2.0	0.50	
Propane	ND	5000	5000	PASS	2.0	0.50	
Total Cat. 1 & 2	425.4						

Heavy Metals:

Method: Acid digestion in heated block. Analysis using graphite furnace, atomic fluorescence spectroscopy, atomic absorption decomposition analysis

Compound	(ug/g)	Inhal. Action Lim. (ug/g)	Other Action Lim. (ug/g)	PASS/FAIL	LOQ (ug/g)	LOD (ug/g)	NOTES:
Mercury	ND	0.1	3	PASS	0.03	0.006	
Lead	ND	0.5	0.5	PASS	0.10	0.020	
Cadmium	ND	0.2	0.5	PASS	0.02	0.004	
Arsenic	ND	0.2	1.5	PASS	0.20	0.040	

Microbiology Analysis:

Analysis	PASS/FAIL	Analysis	CFU/g		
E. coli	PASS	APC	NA		
Salmonella	PASS	Total coliform	NA		
Aspergillus	PASS	Pseudomonas	NA		
nigres	PASS	terreus	PASS	Total yeast & mold	NA
flavus	PASS	fumigatus	PASS	Enterobacteriaceae	NA

Testing performed by:

Pure Analytics
 5468 Skylane Blvd Ste 102
 Santa Rosa, CA 95403
 CA License #: C8-000018-LIC

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Approved by: *Samantha J. Miller*

Certificate of Analysis- Pure Analytics InfoTest™

Customer Name: *Kase Farma*
Sample Name: *CBD Iso 1*
Lab Sample I.D.: *KAS0006-1*
Pesticides Analysis:
Method: Acetone extraction with sonication, dSPE clean-up, LCMSMS and GC-ECD analysis

Compound	Result (ug/g)	Action lim. (ug/g)	PASS/FAIL	LOQ (ug/g)	LOD (ug/g)	NOTES
CA CATEGORY I						
Aldicarb	ND	> LOD	PASS	0.020	0.005	
Carbofuran	ND	> LOD	PASS	0.010	0.001	
Chlordane	ND	> LOD	PASS	0.020	0.005	
Chlorfenapyr	ND	> LOD	PASS	0.100	0.020	
Chlorpyrifos	ND	> LOD	PASS	0.100	0.020	
Coumaphos	ND	> LOD	PASS	0.100	0.005	
Daminozide	ND	> LOD	PASS	0.100	0.010	
Dichlorvos	ND	> LOD	PASS	0.010	0.001	
Dimethoate	ND	> LOD	PASS	0.100	0.020	
Ethoprop	ND	> LOD	PASS	0.100	0.020	
Etofenprox	ND	> LOD	PASS	0.010	0.001	
Fenoxycarb	ND	> LOD	PASS	0.020	0.005	
Fipronil	ND	> LOD	PASS	0.020	0.005	
Imazalil	ND	> LOD	PASS	0.100	0.005	
Methiocarb	ND	> LOD	PASS	0.100	0.005	
Parathion-methyl	ND	> LOD	PASS	0.100	0.010	
Mevinphos	ND	> LOD	PASS	0.100	0.050	
Paclbutrazol	ND	> LOD	PASS	0.100	0.005	
Propoxur	ND	> LOD	PASS	0.010	0.001	
Spiroxamine	ND	> LOD	PASS	0.010	0.001	
Thiacloprid	ND	> LOD	PASS	0.020	0.005	

Mycotoxin Analysis:
Method: Acetone extraction with sonication, dSPE clean-up, LCMSMS analysis

Compound	Result (ug/kg)	Action lim. (ug/kg)	PASS/FAIL	LOQ (ug/kg)	LOD (ug/kg)	NOTES
Aflatoxin B1	ND	NA	PASS	2.0	0.5	
Aflatoxin B2	ND	NA	PASS	2.0	0.5	
Aflatoxin G1	ND	NA	PASS	2.0	0.5	
Aflatoxin G2	ND	NA	PASS	2.0	0.5	
Total Aflatoxin	ND	<20 ug/kg	PASS	2.0	0.5	
Ochratoxin A	ND	<20 ug/kg	PASS	2.0	0.5	

Compound	Result (ug/g)	Action lim. (ug/g)		PASS/FAIL	LOQ (ug/g)	LOD (ug/g)	NOTES
		(Inhale)	(Other)				
Abamectin	ND	0.1	0.3	PASS	0.10	0.001	
Acephate	ND	0.1	5	PASS	0.10	0.02	
Acequinocyl	ND	0.1	4	PASS	0.02	0.02	
Acetamiprid	ND	0.1	5	PASS	0.02	0.02	
Azoxystrobin	ND	0.1	40	PASS	0.02	0.01	
Bifenazate	ND	0.1	5	PASS	0.02	0.001	
Bifenthrin	ND	3	0.5	PASS	0.10	0.005	
Boscalid	ND	0.1	10	PASS	0.02	0.01	
Captan	ND	0.7	5	PASS	0.01	0.005	
Cyfluthrin	ND	2	1	PASS	0.10	0.001	
Cypermethrin	ND	1	1	PASS	0.10	0.05	
Carbaryl	ND	0.5	0.5	PASS	0.02	0.001	
Chlorantranilprole	ND	10	40	PASS	0.02	0.01	
Clofentezine	ND	0.1	0.5	PASS	0.02	0.001	
Diazinon	ND	0.1	0.2	PASS	0.02	0.001	
Dimethomorph	ND	2	20	PASS	0.02	0.001	
Etoazazole	ND	0.1	1.5	PASS	0.02	0.005	
Fenhexamid	ND	0.1	10	PASS	0.01	0.001	
Fenpyroximate	ND	0.1	2	PASS	0.02	0.01	
Fonicamid	ND	0.1	2	PASS	0.02	0.001	
Fludioxonil	ND	0.1	30	PASS	0.10	0.02	
Hexythiazox	ND	0.1	2	PASS	0.02	0.01	
Imidacloprid	ND	5	3	PASS	0.10	0.02	
Kresoxim-methyl	ND	0.1	1	PASS	0.02	0.02	
Malathion	ND	0.5	5	PASS	0.20	0.001	
Metalaxyl	ND	2	15	PASS	0.02	0.01	
Methomyl	ND	1	0.1	PASS	0.02	0.001	
Myclobutanil	ND	0.1	9	PASS	0.005	0.001	
Naled	ND	0.1	0.5	PASS	0.10	0.02	
Oxamyl	ND	0.5	0.2	PASS	0.05	0.01	
Pentachloronitrobenz.	ND	0.1	0.2	PASS	0.10	0.02	
Permethrin	ND	0.5	20	PASS	0.025	0.005	
Phosmet	ND	0.1	0.2	PASS	0.02	0.02	
Piperonyl butoxide	ND	3	8.0	PASS	0.005	0.001	
Prallethrin	ND	0.1	0.4	PASS	0.02	0.01	
Propiconazole	ND	0.1	20.0	PASS	0.02	0.01	
Pyrethrins	ND	0.5	1	PASS	0.07	0.01	
Pyridaben	ND	0.1	3	PASS	0.02	0.001	
Spinetoram	ND	0.1	3	PASS	0.07	0.005	
Spinosad	ND	0.1	3	PASS	0.10	0.02	
Spiromesifen	ND	0.1	12	PASS	0.10	0.02	
Spirotetramat	ND	0.1	13	PASS	0.10	0.02	
Tebuconazole	ND	0.1	2	PASS	0.10	0.02	
Trifloxystrobin	ND	0.10	30	PASS	0.01	0.005	
Thiamethoxam	ND	5	4.5	PASS	0.10	0.01	

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Customer Name: Kase Farma

Sample Name: CBD Iso 1

Lab Sample I.D.: KAS0006-1

Terpene Analysis:

Method: Methanol Extraction with Sonication and GC-FID Analysis

Compound	% wt.	Action lim. (ug/kg)	PASS/ FAIL	LOQ (ug/kg)	LOD (ug/kg)	NOTES
α-Pinene	NA	NA	NA	0.01	0.005	
Camphene	NA	NA	NA	0.01	0.005	
β-Pinene	NA	NA	NA	0.01	0.005	
β-Myrcene	NA	NA	NA	0.01	0.005	
3-Carene	NA	NA	NA	0.01	0.005	
R-Limonene	NA	NA	NA	0.01	0.005	
Eucalyptol	NA	NA	NA	0.01	0.005	
Ocimene	NA	NA	NA	0.01	0.005	
γ-Terpinene	NA	NA	NA	0.01	0.005	
Terpinolene	NA	NA	NA	0.01	0.005	
Linalool	NA	NA	NA	0.01	0.005	
Fenchol	NA	NA	NA	0.01	0.005	
(+)-Pulegone	NA	NA	NA	0.01	0.005	
Menthol	NA	NA	NA	0.01	0.005	
Borneol	NA	NA	NA	0.01	0.005	
α-Terpineol	NA	NA	NA	0.01	0.005	
Geraniol	NA	NA	NA	0.01	0.005	
β-Caryophyllene	NA	NA	NA	0.01	0.005	
α-Humulene	NA	NA	NA	0.01	0.005	
Valencene	NA	NA	NA	0.01	0.005	
Farnesene	NA	NA	NA	0.01	0.005	
trans-Nerolidol	NA	NA	NA	0.01	0.005	
cis-Nerolidol	NA	NA	NA	0.01	0.005	
Guaiol	NA	NA	NA	0.01	0.005	
α-Bisabolol	NA	NA	NA	0.01	0.005	
Eicosane	NA	NA	NA	0.01	0.005	
Camphor	NA	NA	NA	0.01	0.005	
L-Fenchone	NA	NA	NA	0.01	0.005	
Sabinene	NA	NA	NA	0.01	0.005	
β-Caryoph. Ox.	NA	NA	NA	0.01	0.005	
Phytol	NA	NA	NA	0.01	0.005	
a-Phellandrene	NA	NA	NA	0.01	0.005	
Total %	NA					

Filth & Foreign Material Inspection:

Filth & Foreign Material by method 89370.96 using stereo microscope

Filth & Foreign Inspection

Observations:

PASS/ FAIL

PASS

Water Activity Analysis:

Water Activity by method 89370.98 on a Novasina LabTouch-aw

Water Activity	Result	Action Limit (Aw)		PASS/ FAIL
		Inhale	Other	
Aw	NA	0.65	0.85	NA

Moisture Content Analysis:

Moisture Content method by method 89370.98 using ThermoFisher programmable oven

Moisture Content	Result	Action Limit	PASS/ FAIL
% Moisture	NA	13.0%	NA

Vitamin E Acetate Analysis:

Method: Extraction by Acetone with sonication and analysis by HPLC-DAD

Compound	Result	Action Limit (mg/kg)	LOQ (mg/kg)
Vitamin E Acetate	NA	NA	5.00

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