



Atlas Agriscience, LLC

Certificate of Analysis



ATLAS HEMP, LLC

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1-800-801-ATLAS

REF#: 129-March-2020

Received: 08/09/2024
Analyzed: 08/13/2024
Reported: 08/24/2024

DUTCHBERRY

This is the lab results for the Dutchberry Terpene Sample, ID:129

POTENCY

Total potential THC: 0
Total potential CBD: 0
Total cannabinoids: 0

Laboratory note : This product contains terpenes and terpenoids. It does not contain cannabinoids.



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TERPENES

1.64% Total	mass %	mg/g	LOD	LOQ	GCMS				
alpha-Bisabolol	0.011	0.11	0.03	0.09	β -Eudesmol	0.062	0.62	0.02	0.09
Guaiol	0.044	0.44	0.01	0.09	Bisabolene	0.054	0.54	0.03	0.11
D-Menthol	0.006	0.06	0.03	0.09	D-Limonene	0.027	0.27	0.03	0.09
Linalool	0.01	0.1	0.04	0.13	BetaCaryophyllene	0.108	1.08	0.03	0.05
alpha-Farnesene	0.017	0.17	0.03	0.09	Humulene	0.027	0.27	0.03	0.11
Myrcene	0.399	3.99	0.02	0.07	3-Carene	0.025	0.25	0.01	0.09
Sabinene	0.007	0.07	0.1	0.32	alpha-Pinene	0.045	0.45	0.006	0.02
alpha-Phellandrene	0.037	0.37	0.01	0.05	gamma-Terpinene	0.012	0.12	0.01	0.05
alpha-Terpinene	0.022	0.22	0.03	0.09	4-Carvomenthenol	0.005	0.05	0.03	0.09
Terpinolene	0.512	5.12	0.00016	0.0013	beta-Pinene	0.064	0.64	0.03	0.05
Fenchol	0.003	0.03	0.02	0.09	beta-Ocimene	0.142	1.42	0.03	0.09
Hashishene	< LOD	< LOD	0.03	0.09	Carbon Dioxide	< LOD	< LOD	0.03	0.09
Citric Acid	< LOD	< LOD	0.03	0.09	Octane	< LOD	< LOD	0.03	0.09
Octanal	< LOD	< LOD	0.03	0.09	Guaiacol	< LOD	< LOD	0.03	0.09
Malic Acid	< LOD	< LOD	0.03	0.09	Edible Alcohol	< LOD	< LOD	0.03	0.09
Glycerol	< LOD	< LOD	0.03	0.09	1-Octanol	< LOD	< LOD	0.03	0.09
Distilled Water	< LOD	< LOD	0.03	0.09	Propylene glycol	< LOD	< LOD	0.03	0.09
Toluene	< LOD	< LOD	0.03	0.09	Vanillin	< LOD	< LOD	0.03	0.09
Menthol	< LOD	< LOD	0.03	0.09	Camphor	< LOD	< LOD	0.01	0.09
CBN	< LOD	< LOD	0.03	0.09	Eucalyptol	< LOD	< LOD	0.05	0.19
Decanoic acid	< LOD	< LOD	0.03	0.09	THC	< LOD	< LOD	0.03	0.09
1-Pentanol	< LOD	< LOD	0.03	0.09	Bornyl acetate	< LOD	< LOD	0.03	0.09
Ethyl methylphenylglycidate	< LOD	< LOD	0.03	0.09	Tetraethyl orthosilicate	< LOD	< LOD	0.03	0.09
Camphene	< LOD	< LOD	0.008	0.09	bisphenol a	< LOD	< LOD	0.03	0.09
Cyclotene	< LOD	< LOD	0.03	0.09	piperitone	< LOD	< LOD	0.03	0.09
Pulegone	< LOD	< LOD	0.03	0.09	Thymol	< LOD	< LOD	0.03	0.09
Methyl eugenol	< LOD	< LOD	0.03	0.09	Ethyl lactate	< LOD	< LOD	0.03	0.09
Isobutyl isobutyrate	< LOD	< LOD	0.03	0.09	p-Cymene	< LOD	< LOD	0.01	0.09
gamma-Octanoic lactone	< LOD	< LOD	0.03	0.09	Gamma-undecalactone	< LOD	< LOD	0.03	0.09
Ethyl propionate	< LOD	< LOD	0.03	0.09	Ethyl butyrate	< LOD	< LOD	0.03	0.09
isoamyl propionate	< LOD	< LOD	0.03	0.09	Citronellal	< LOD	< LOD	0.03	0.09
isoamyl butyrate	< LOD	< LOD	0.03	0.09	ethyl heptanoate	< LOD	< LOD	0.03	0.09
Methyl hexanoate	< LOD	< LOD	0.03	0.09	methyl heptanoate	< LOD	< LOD	0.03	0.09
Isopropyl acetate	< LOD	< LOD	0.03	0.09	Ethyl isovalerate	< LOD	< LOD	0.03	0.09
Butyl butyrate	< LOD	< LOD	0.03	0.09	Isobutyl acetate	< LOD	< LOD	0.03	0.09
2-Heptanone	< LOD	< LOD	0.03	0.09	methyl octanoate	< LOD	< LOD	0.03	0.09
1-Hexanol	< LOD	< LOD	0.03	0.09	1-Heptanol	< LOD	< LOD	0.03	0.09
Heptanal	< LOD	< LOD	0.03	0.09	octyl acetate	< LOD	< LOD	0.03	0.09
decanal	< LOD	< LOD	0.03	0.09	Linalyl acetate	< LOD	< LOD	0.03	0.09
2-Methylbutyric Acid	< LOD	< LOD	0.03	0.09	Maltol	< LOD	< LOD	0.03	0.09
Ethyl vanillin	< LOD	< LOD	0.03	0.09	Methyl anthranilate	< LOD	< LOD	0.03	0.09
Butyl lactate	< LOD	< LOD	0.03	0.09	Methyl chavicol	< LOD	< LOD	0.03	0.09
Citronellol	< LOD	< LOD	0.04	0.09	Ethyl acetate	< LOD	< LOD	0.03	0.09
pyridinol	< LOD	< LOD	0.03	0.09	Hexanoic acid	< LOD	< LOD	0.03	0.09
Hexyl acetate	< LOD	< LOD	0.03	0.09	Citronellyl acetate (dl- <i>citronellol</i>)	< LOD	< LOD	0.03	0.09
6-Methyl-5-hepten-2-one	< LOD	< LOD	0.03	0.09	cineole	< LOD	< LOD	0.03	0.09
cis-2-Pinanol	< LOD	< LOD	0.03	0.09	Carvacrol	< LOD	< LOD	0.03	0.09
Cycloheptanone	< LOD	< LOD	0.03	0.09	beta-Cadinene	< LOD	< LOD	0.03	0.09
O-Cymene	< LOD	< LOD	0.03	0.09	m-cymene	< LOD	< LOD	0.03	0.09
Pentyl butyrate	< LOD	< LOD	0.03	0.09	Isobutyl propionate	< LOD	< LOD	0.03	0.09
Beta-Phellandrene	< LOD	< LOD	0.03	0.09	gamma-Terpineol	< LOD	< LOD	0.03	0.09
Butyl propionate	< LOD	< LOD	0.03	0.09	3-Methylbutanal	< LOD	< LOD	0.03	0.09
5-Methylfurfural	< LOD	< LOD	0.03	0.09	Methyl butyrate	< LOD	< LOD	0.03	0.09
Propyl hexanoate	< LOD	< LOD	0.03	0.09	Pentyl acetate	< LOD	< LOD	0.03	0.09
phytane	< LOD	< LOD	0.03	0.09	Octadecanal	< LOD	< LOD	0.03	0.09
valerolactam	< LOD	< LOD	0.03	0.09	gamma-Caprolactone	< LOD	< LOD	0.03	0.09
delta-Dodecalactone	< LOD	< LOD	0.03	0.09	2-nonanone	< LOD	< LOD	0.03	0.09
1,1-Dimethoxycyclohexane	< LOD	< LOD	0.03	0.09	2-Acetylpyrrole	< LOD	< LOD	0.03	0.09
2,3,5,6-Tetramethylpyrazine	< LOD	< LOD	0.03	0.09	Fenchone	< LOD	< LOD	0.01	0.09
Dronabinol	< LOD	< LOD	0.03	0.09	d-carvone	< LOD	< LOD	0.03	0.09
Hexyl isobutyrate	< LOD	< LOD	0.03	0.09	Terpineol	< LOD	< LOD	0.07	0.23
Hexyl butyrate	< LOD	< LOD	0.03	0.09	Allyl cyclohexanepropioate	< LOD	< LOD	0.03	0.09
alpha-Thujene	< LOD	< LOD	0.03	0.09	Furaneol AKA 4-Hydroxy-2,5-dimethyl-	< LOD	< LOD	0.03	0.09
Ethyl maltol	< LOD	< LOD	0.03	0.09	2,3-Dimethylpyrazine	< LOD	< LOD	0.03	0.09
Linalyl oxide	< LOD	< LOD	0.03	0.09	Limonene	< LOD	< LOD	0.03	0.05
Hexyl hexanoate	< LOD	< LOD	0.03	0.09	Ethyl 2-methylbutyrate	< LOD	< LOD	0.03	0.09
I-menthone	< LOD	< LOD	0.03	0.09	2,3,5-Trimethylpyrazine	< LOD	< LOD	0.03	0.09
Rose oxide	< LOD	< LOD	0.03	0.09	menthyl acetate	< LOD	< LOD	0.03	0.09

R-a-Pinene	< LOD	< LOD	0.03	0.09	Strawberry fragaria vesca L. Dui	< LOD	0.03	0.09	
Rose Powder	< LOD	< LOD	0.03	0.09	Ginger Powder	< LOD	< LOD	0.03	0.09
Heavy Milk	< LOD	< LOD	0.03	0.09	Citrus-auran-fifolia Swingle	< LOD	< LOD	0.03	0.09
Fatty Acid	< LOD	< LOD	0.03	0.09	Coco Extract	< LOD	< LOD	0.03	0.09

Laboratory note : This product contains terpenes and terpenoids. It does not contain cannabinoids.



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CANNABINOIDS

	mass %	mg/g	LOD	LOQ		mass %	mg/g	LOD	LOQ
Δ9-THC	0	0	0.01	0.03	Δ8-THC	0	0	0.01	0.03
THCa	0	0	0.01	0.03	THCV	0	0	0.01	0.03
CBD	0	0	0.01	0.03	THCVA	0	0	0.01	0.03
CBDa	0	0	0.01	0.03	CBDV	0	0	0.01	0.03
CBG	0	0	0.01	0.03	CBDVA	0	0	0.01	0.03
CBGa	0	0	0.01	0.03	CBCV	0	0	0.01	0.03
CBN	0	0	0.01	0.03	CBCO	0	0	0.01	0.03
CBNa	0	0	0.01	0.03	CBL	0	0	0.01	0.03
CBC	0	0	0.01	0.03	CBLA	0	0	0.01	0.03
CBCa	0	0	0.01	0.03	CBT	0	0	0.01	0.03

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PESTICIDES

3-Hydroxycarbofuran	< LOD	0.075	0.25	Abamectin B1a	< LOD	0.15	0.45
Acephate	< LOD	0.1	0.3	Acetamiprid	< LOD	0.033	0.1
Aldicarb Sulfone	< LOD	0.05	0.2	Aldicarb	< LOD	0.075	0.25
Aminocarb	< LOD	0.033	0.1	Azoxystrobin	< LOD	0.05	0.2
Benalaxydil	< LOD	0.05	0.15	Bifenthrin	< LOD	0.05	0.2
Bifenazate	< LOD	0.05	0.2	Boscalid	< LOD		
Butafenacil	< LOD	0.05	0.15	Carbaryl	< LOD	0.05	0.2
Carbetamide	< LOD	0.05	0.15	Carbofuran	< LOD	0.05	0.15
Carboxin	< LOD	0.05	0.15	Carfentrazone-ethyl	< LOD	0.05	0.2
Chlorantraniliprole	< LOD	0.075	0.25	Chlorotoluron	< LOD	0.05	0.2
Chloroxuron	< LOD	0.05	0.15	Chlorpyrifos	< LOD	0.075	0.25
Clofentezine	< LOD			Clothianidin	< LOD	0.05	0.15
Cyazofamid	< LOD	0.05	0.15	Cycluron	< LOD	0.05	0.15
Diazinon	< LOD	0.05	0.2	Dicrotophos	< LOD	0.05	0.15
Diethofencarb	< LOD	0.05	0.15	Dimethoate	< LOD	0.05	0.2
Dimethomorph	< LOD	0.05	0.2	Dimoxystrobin	< LOD	0.05	0.15
Diuron	< LOD	0.1	0.3	Epiconazole	< LOD	0.075	0.25
Ethiofencarb	< LOD	0.075	0.25	Ethoprophos	< LOD	0.1	0.4
Etofenprox	< LOD	0.04	0.125	Etoxazole	< LOD	0.05	0.2
Fenamidone	< LOD	0.05	0.15	Fenazaquin	< LOD	0.05	0.2
Fenoxy carb	< LOD	0.05	0.2	Fenpyroximate	< LOD	0.04	0.125
Fenuron	< LOD	0.033	0.1	Fipronil	< LOD	0.1	0.3
Flonicamid	< LOD			Fluazinam	< LOD	0.075	0.25
Fludioxonil	< LOD			Flufenacet	< LOD	0.05	0.2
Fluometuron	< LOD	0.05	0.2	Flutolanil	< LOD	0.05	0.2
Fuberidazole	< LOD	0.033	0.1	Furalaxydil	< LOD	0.05	0.15
Furathiocarb	< LOD	0.05	0.2	Hexythiazox	< LOD	0.05	0.2
Imazalil	< LOD	0.1	0.4	Imidacloprid	< LOD	0.05	0.2
Indoxacarb	< LOD	0.05	0.2	Iprovalicarb	< LOD	0.05	0.2
Isopropcarb	< LOD	0.075	0.25	Isoproturon	< LOD	0.05	0.15
Kresoxym-methyl	< LOD	0.1	0.3	Malathion	< LOD	0.05	0.2
Mandipropamid	< LOD	0.05	0.2	Mefenacet	< LOD	0.05	0.15
Metalaxydil	< LOD	0.033	0.1	Methabenzthiazul	< LOD	0.05	0.15
Methamidophos	< LOD	0.05	0.15	Methiocarb	< LOD		
Methomyl	< LOD	0.05	0.2	Methoprotynine	< LOD	0.05	0.2
Methoxyfenozide	< LOD	0.05	0.15	Mexacarbate	< LOD	0.033	0.1
Monocrotophos	< LOD	0.05	0.15	Myclobutanil	< LOD	0.075	0.25
Nitenpyram	< LOD	0.05	0.15	Omethoate	< LOD	0.05	0.2
Oxadixyl	< LOD	0.075	0.25	Oxamyl	< LOD	0.033	0.1
Paclobutrazol	< LOD	0.05	0.15	Permethrin	< LOD	0.05	0.2
Phosmet	< LOD			Picoxydostrobin	< LOD	0.05	0.2
Piperonyl Butoxide	< LOD	0.05	0.15	Pirimicarb	< LOD	0.05	0.15
Prometon	< LOD	0.05	0.2	Propamocarb	< LOD	0.04	0.125
Propargite	< LOD	0.05	0.15	Propoxur	< LOD	0.04	0.125
Pymetrozine	< LOD	0.05	0.2	Pyracarbolid	< LOD	0.04	0.125
Pyraclostrobin	< LOD	0.1	0.3	Pyrethrin I	< LOD		
Pyrethrin II	< LOD	0.075	0.25	Pyridaben	< LOD	0.05	0.2
Pyriproxyfen	< LOD	0.04	0.125	Quinoxifen	< LOD	0.033	0.1
Rotenone	< LOD	0.05	0.15	Spinosad A	< LOD	0.05	0.2
Spinosad D	< LOD	0.05	0.2	Spiromesifen	< LOD	0.04	0.125
Spirotetramat	< LOD	0.033	0.1	Spiroxamine	< LOD	0.05	0.15
Tebuconazole	< LOD			Tebufenozide	< LOD	0.05	0.15
Tebuthiuron	< LOD			Thiacloprid	< LOD	0.05	0.15
Thiamethoxam	< LOD	0.05	0.2	Thiobencarb	< LOD	0.05	0.2
Thiophanate-Methyl	< LOD	0.033	0.1	Tricyclazole	< LOD	0.05	0.15
Trifloxystrobin	< LOD	0.05	0.2	Triflumizole	< LOD	0.05	0.15
Uniconazole	< LOD	0.1	0.4	Vamidothion	< LOD	0.033	0.1
Zoxamide	< LOD	0.05	0.2				



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HEAVY METALS

	<u>µg/g</u>	LOD	LOQ
Arsenic (As)	< LOD	0.004	0.012
Cadmium (Cd)	< LOD	0.002	0.008
Lead (Pb)	< LOD	0.002	0.004
Mercury (Hg)	< LOD	0.004	0.018

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