CERTIFICATE OF ANALYSIS

DATE ISSUED: 04/17/2024

TRUE TERPENES

IDENTIFICATION	
PRODUCT NAME	Marionberry Kush
PRODUCT DESIGNATION	Proprietary Terpene Blend – Live Alchemy
TRUE TERPENES PRODUCT #	TTL-AC-MBKS
FINISHED GOOD LOT #	23102511
RECOMMENDED USE BY DATE	January 2025
CAS #	Mixture
EC #	Mixture
MANUFACTURING DATE	10/25/2023
DENSITY*	0.85 g/mL

PARAMETER	SPECIFICATION	RESULT
APPEARANCE	CLEAR, PALE YELLOW LIQUID	PASSES VISUALLY
ODOR	CARAMELIZED BLACKBERRY, GAS, EARTH	PASSES SENSORY
HEAVY METALS	PASSES TESTING	PASSES TESTING
PESTICIDES	PASSES TESTING	PASSES TESTING
RESIDUAL SOLVENTS	PASSES TESTING	PASSES TESTING

ADDITIONAL PRODUCT INFORMATION:

Storage Conditions:

Stable when stored in its original container securely tightened and away from heat, open flames, sunlight, combustible materials and hot surfaces. Store in a cool, dry, and well-ventilated place.

Heavy Metal Results (ppm)

Analyte	Max Allowed	LOQ	Result	Analyte	Max Allowed	LOQ	Result
Arsenic	0.11	0.0987	< LOQ	Cadmium	0.11	0.0987	< LOQ
Lead	0.11	0.0987	< LOQ	Mercury	0.06	0.0493	< LOQ

Pesticide Results (ppm)

Analyte	Max Allowed	LOQ	Result	Analyte	Max Allowed	LOQ	Result
Abamectin	0.07	0.07	< LOQ	Acephate	0.02	0.02	< LOQ
Acequinocyl	0.03	0.03	< LOQ	Acetamiprid	0.05	0.05	< LOQ
Aldicarb	0.10	0.10	< LOQ	Allethrin	0.10	0.10	< LOQ
Azadirachtin	0.50	0.50	< LOQ	Azoxystrobin	0.01	0.01	< LOQ
Benzovindiflupyr	0.01	0.01	< LOQ	Bifenazate	0.01	0.01	< LOQ
Bifenthrin	0.10	0.10	< LOQ	Boscalid	0.01	0.01	< LOQ
Buprofezin	0.01	0.01	< LOQ	Captan	0.70	0.70	< LOQ
Carbaryl	0.03	0.03	< LOQ	Carbofuran	0.01	0.01	< LOQ
Chlorantraniliprole	0.01	0.01	< LOQ	Chlordane	0.10	0.10	< LOQ
Chlorfenapyr	0.10	0.10	< LOQ	Chlorpyrifos	0.01	0.01	< LOQ
Clofentezine	0.01	0.01	< LOQ	Clothianidin	0.03	0.03	< LOQ
Coumaphos	0.01	0.01	< LOQ	Cyantraniliprole	0.01	0.01	< LOQ
Cyfluthrin	0.40	0.40	< LOQ	Cypermethrin	0.30	0.30	< LOQ
Cyprodinil	0.01	0.01	< LOQ	Daminozide	0.05	0.05	< LOQ
Deltamethrin	0.50	0.50	< LOQ	Diazinon	0.01	0.01	< LOQ
Dichlorvos	0.05	0.05	< LOQ	Dimethoate	0.01	0.01	< LOQ

**Density is calculated based on product formulation.*

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Pesticide Results (ppm)

Analyte	Max Allowed	LOQ	Result	Analyte	Max Allowed	LOQ	Result
Dimethomorph	0.05	0.05	< LOQ	Dinotefuran	0.05	0.05	< LOQ
Dodemorph	0.05	0.05	< LOQ	Endosulfan Sulfate	0.05	0.05	< LOQ
α-Endosulfan	0.10	0.05	< LOQ	β-Endosulfan	0.05	0.05	< LOQ
Ethoprophos	0.01	0.01	< LOQ	Etofenprox	0.01	0.01	< LOQ
Etoxazole	0.01	0.01	< LOQ	Etridiazole	0.05	0.05	< LOQ
Fenhexamid	0.10	0.10	< LOQ	Fenoxycarb	0.01	0.01	< LOQ
Fenpyroximate	0.02	0.02	< LOQ	Fensulfothion	0.01	0.01	< LOQ
Fenthion	0.01	0.01	< LOQ	Fenvalerate	0.20	0.20	< LOQ
Fipronil	0.01	0.01	< LOQ	Flonicamid	0.03	0.03	< LOQ
Fludioxonil	0.01	0.01	< LOQ	Fluopyram	0.01	0.01	< LOQ
Hexythiazox	0.01	0.01	< LOQ	Imazalil	0.01	0.01	< LOQ
Imidacloprid	0.01	0.01	< LOQ	Iprodione	0.50	0.50	< LOQ
Kinoprene	0.05	0.05	< LOQ	Kresoxim-methyl	0.01	0.01	< LOQ
Malathion	0.01	0.01	< LOQ	Metalaxyl	0.01	0.01	< LOQ
Methiocarb	0.01	0.01	< LOQ	Methomyl	0.03	0.03	< LOQ
Methoprene	1.00	1.00	< LOQ	Mevinphos	0.03	0.03	< LOQ
MGK-264	0.05	0.05	< LOQ	Myclobutanil	0.01	0.01	< LOQ
Naled	0.10	0.10	< LOQ	Novaluron	0.03	0.03	< LOQ
Oxamyl	0.50	0.50	< LOQ	Paclobutrazol	0.01	0.01	< LOQ
Parathion-Methyl	0.03	0.03	< LOQ	Pentachloronitrobenzene (Quintozene)	0.02	0.02	< LOQ
Permethrin	0.04	0.04	< LOQ	Phenothrin	0.03	0.03	< LOQ
Phosmet	0.01	0.01	< LOQ	Piperonyl butoxide	0.20	0.20	< LOQ
Pirimicarb	0.01	0.01	< LOQ	Prallethrin	0.05	0.05	< LOQ
Propiconazole	0.01	0.01	< LOQ	Propoxur	0.01	0.01	< LOQ
Pyraclostrobin	0.01	0.01	< LOQ	Pyrethrins	0.03	0.03	< LOQ
Pyridaben	0.02	0.02	< LOQ	Resmethrin	0.02	0.02	< LOQ
Spinetoram	0.01	0.01	< LOQ	Spinosad	0.01	0.01	< LOQ
Spirodiclofen	0.25	0.25	< LOQ	Spiromesifen	0.03	0.03	< LOQ
Spirotetramat	0.01	0.01	< LOQ	Spiroxamine	0.01	0.01	< LOQ
Tebuconazole	0.01	0.01	< LOQ	Tebufenozide	0.01	0.01	< LOQ
Teflubenzuron	0.03	0.03	< LOQ	Tetrachlorvinphos	0.01	0.01	< LOQ
Tetramethrin	0.05	0.05	< LOQ	Thiacloprid	0.01	0.01	< LOQ
Thiamethoxam	0.01	0.01	< LOQ	Thiophanate-Methyl	0.03	0.03	< LOQ
Trifloxystrobin	0.01	0.01	< LOQ				

Residual Solvent Results (ppm)

Analyte	Max Allowed	LOQ	Result	Analyte	Max Allowed	LOQ	Result
1-Butanol	5000	500	< LOQ	1-Pentanol	5000	500	< LOQ
1,2-Dichloroethane	1.0	1.0	< LOQ	1,2-Dimethoxyethane	100	50	< LOQ
1,4-Dioxane	380	100	< LOQ	2-Butanol	5000	200	< LOQ
2-Butanone (Methylethylketone)	500	500.0	< LOQ	2-Ethoxyethanol	160	30	< LOQ
2-Methyl-1-Propanol	5000	500	Not Tested	2-Methylbutane (Isopentane)	750	200	< LOQ
2-Methylpentane	30	30	< LOQ	2-Propanol (IPA)	500	200	< LOQ
2,2-Dimethylbutane	30	30	< LOQ	2,2-Dimethylpropane (Neopentane)	750	200	< LOQ

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Residual Solvent Results (ppm)

Analyte	Max Allowed	LOQ	Result	Analyte	Max Allowed	LOQ	Result
2,3-Dimethylbutane	30	30	< LOQ	3-Methyl-1-Butanol (Isoamyl Alcohol)	500	500	Not Tested
3-Methylpentane	30	30	< LOQ	Acetic acid	5000	250	Not Tested
Acetone	500	200	< LOQ	Acetonitrile	100	100	< LOQ
Anisole	5000	500	Not Tested	Benzene	1.0	1.0	< LOQ
Butanes	500	400	< LOQ	Butyl acetate	500	500	Not Tested
Chloroform	1.0	1.0	< LOQ	Cyclohexane	3880	200	< LOQ
Dimethyl sulfoxide (DMSO)	5000	500	Not Tested	Ethanol	500	200	< LOQ
Ethyl acetate	400	200	< LOQ	Ethyl benzene	200	200	< LOQ
Ethyl ether	500	200	< LOQ	Ethyl formate	5000	500	Not Tested
Ethylene glycol	620	200	< LOQ	Ethylene oxide	1.0	1.0	< LOQ
Formic acid	5000	250	Not Tested	Hexanes	150	150	< LOQ
Isobutyl acetate	5000	500	Not Tested	Isopropyl acetate	310	200	< LOQ
Isopropylbenzene (Cumene)	70	30	Not Tested	Methanol	250	200	< LOQ
Methyl acetate	500	500	Not Tested	Methyl-t-butyl ether	5000	500	Not Tested
Methylene chloride	1.0	1.0	< LOQ	Methylisobutylketone	4500	500	Not Tested
Methylpropane (Isobutane)	500	200	< LOQ	n-Butane	500	200	< LOQ
n-Heptane	500	200	< LOQ	n-Hexane	30	30	< LOQ
n-Pentane	500	200	< LOQ	n-Propanol	500	500	< LOQ
N,N-Dimethylacetamide	1090	200	< LOQ	N,N-Dimethylformamide	880	200	< LOQ
Pentanes	750	600	< LOQ	Propane	500	200	< LOQ
Propyl acetate	500	500	Not Tested	Pyridine	100	50	< LOQ
Sulfolane	160	50	Not Tested	Tetrahydrofuran	250	100	< LOQ
Toluene	150	100	< LOQ	Total Residual Solvents	5000	5000	< LOQ
Total Xylenes	400	400	< LOQ	Total Xylenes and Ethyl benzene	600	600	< LOQ
Trichloroethylene	1.0	1.0	< LOQ	Triethylamine	5000	500	Not Tested

Reviewed by Shea Hamilton

Date: 04/17/2024

Disclaimer:

This Certificate of Analysis contains results provided by ISO 17025 certified contract laboratories external to True Terpenes, as well as results determined by validated method in True Terpenes' internal laboratory. This document does not relieve the purchaser from any responsibility for conducting their own tests in order to verify the suitability of this product for their application and to comply with all relevant legal requirements for any goods into which this product is incorporated. Some or all of this product is derived from hemp and may contain cannabinoids or other hemp-derived extracts. The "max allowed" limits in this Certificate of Analysis are reflective of True Terpenes' internal specifications and may not be inclusive of all compound regulations in your region for your finished product type.

The Recommended Use By Date is based on a representative study which has shown stability of color, odor, solvents, and terpene profile throughout the defined period under advised storage conditions. Addition of our product as an ingredient at any point until the recommended use by date should provide a consistent experience. This date is guidance based on optimum storage conditions; exposure to oxygen, light, heat, extreme cold, or other unanticipated conditions may result in degradation of the terpenes prior to the end of the stated recommended use by date. Any directions on the product label to refrigerate during storage should be followed. Botanically derived and/or synthetic compounds found in this product may contain trace compounds which can potentially result in a slight variance between lots.