

# CERTIFICATE OF ANALYSIS

DATE ISSUED: 04/17/2024



## IDENTIFICATION

|                         |  |
|-------------------------|--|
| PRODUCT NAME            | Marionberry Kush                         |
| PRODUCT DESIGNATION     | TTL-AC-MBKS                              |
| TRUE TERPENES PRODUCT # | Proprietary Terpene Blend – Live Alchemy |
| FINISHED GOOD LOT #     | 23042511                                 |
| RECOMMENDED USE BY DATE | January 2025                             |
| CAS #                   | Mixture                                  |
| EC #                    | Mixture                                  |
| MANUFACTURING DATE      | 04/25/2023                               |
| 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         | 0.025       | 0.025 | < LOQ  | Acetamiprid      | 0.05        | 0.05  | < LOQ  |
| Aldicarb            | 0.1         | 0.1   | < LOQ  | Allethrin        | 0.1         | 0.1   | < LOQ  |
| Azadirachtin        | 0.5         | 0.5   | < LOQ  | Azoxystrobin     | 0.01        | 0.01  | < LOQ  |
| Benzovindiflupyr    | 0.01        | 0.01  | < LOQ  | Bifenazate       | 0.01        | 0.01  | < LOQ  |
| Bifenthrin          | 0.1         | 0.1   | < LOQ  | Boscalid         | 0.01        | 0.01  | < LOQ  |
| Buprofezin          | 0.01        | 0.01  | < LOQ  | Captan           | 0.7         | 0.7   | < LOQ  |
| Carbaryl            | 0.025       | 0.025 | < LOQ  | Carbofuran       | 0.01        | 0.01  | < LOQ  |
| Chlorantraniliprole | 0.01        | 0.01  | < LOQ  | Chlordane        | 0.1         | 0.1   | < LOQ  |
| Chlorfenapyr        | 0.1         | 0.1   | < LOQ  | Chlorpyrifos     | 0.01        | 0.01  | < LOQ  |
| Clofentezine        | 0.01        | 0.01  | < LOQ  | Clothianidin     | 0.025       | 0.025 | < LOQ  |
| Coumaphos           | 0.01        | 0.01  | < LOQ  | Cyantraniliprole | 0.01        | 0.01  | < LOQ  |
| Cyfluthrin          | 0.4         | 0.4   | < LOQ  | Cypermethrin     | 0.3         | 0.3   | < LOQ  |
| Cyprodinil          | 0.01        | 0.01  | < LOQ  | Daminozide       | 0.05        | 0.05  | < LOQ  |
| Deltamethrin        | 0.5         | 0.5   | < 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     | 0.1         | 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       | 0.1         | 0.1   | < 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                          | 0.2         | 0.2   | < LOQ  |
| Fipronil         | 0.01        | 0.01  | < LOQ  | Flonicamid                           | 0.025       | 0.025 | < 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                            | 0.5         | 0.5   | < 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                             | 0.025       | 0.025 | < LOQ  |
| Methoprene       | 1           | 1.0   | < LOQ  | Mevinphos                            | 0.025       | 0.025 | < LOQ  |
| MGK-264          | 0.05        | 0.05  | < LOQ  | Myclobutanil                         | 0.01        | 0.01  | < LOQ  |
| Naled            | 0.1         | 0.1   | < LOQ  | Novaluron                            | 0.025       | 0.025 | < LOQ  |
| Oxamyl           | 0.5         | 0.5   | < 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                           | 0.025       | 0.025 | < LOQ  |
| Phosmet          | 0.01        | 0.01  | < LOQ  | Piperonyl butoxide                   | 0.2         | 0.2   | < 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                           | 0.025       | 0.025 | < 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    | 0.025       | 0.025 | < 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           | 1.0 | < LOQ      | 1,2-Dimethoxyethane              | 100         | 50.0 | < LOQ  |
| 1,4-Dioxane                    | 380         | 100 | < LOQ      | 2-Butanol                        | 5000        | 200  | < LOQ  |
| 2-Butanone (Methylethylketone) | 500         | 500 | < 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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| 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           | 1.0  | < LOQ      |
| Butanes                   | 500         | 400 | < LOQ      | Butyl acetate                        | 500         | 500  | Not Tested |
| Chloroform                | 1           | 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           | 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           | 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           | 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.

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