

# CERTIFICATE OF ANALYSIS

DATE ISSUED: 10/20/2025



## IDENTIFICATION

|                                       |              |
|---------------------------------------|--------------|
| PRODUCT NAME                          | Limonene     |
| PRODUCT DESIGNATION                   | Isolate      |
| TRUE TERPENES PRODUCT #               | TTI-LIMO     |
| FINISHED GOOD LOT #                   | 25101616     |
| RECOMMENDED USE BY DATE (RETEST DATE) | January 2028 |
| CAS #                                 | 5989-27-5    |
| EC #                                  | 227-813-5    |
| MANUFACTURING DATE                    | 10/16/2025   |
| PRODUCT RELEASE DATE                  | 10/17/2025   |
| DENSITY*                              | 0.84 g/mL    |

| PARAMETER         | SPECIFICATION                   | RESULT          |
|-------------------|---------------------------------|-----------------|
| APPEARANCE        | COLORLESS TO PALE YELLOW LIQUID | PASSES VISUALLY |
| ODOR              | FRESH, LIGHT, MILD ORANGE       | 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        | 0.0805 | < LOQ  | Cadmium | 0.11        | 0.0805 | < LOQ  |
| Lead    | 0.11        | 0.0805 | < LOQ  | Mercury | 0.06        | 0.0402 | < 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       | 0.02 | < LOQ  | Acetamiprid      | 0.05        | 0.02 | < LOQ  |
| Aldicarb            | 0.1         | 0.1  | < LOQ  | Allethrin        | 0.1         | 0.1  | < LOQ  |
| Azadirachtin        | 0.5         | 0.2  | < 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       | 0.02 | < LOQ  | Carbofuran       | 0.01        | 0.01 | < LOQ  |
| Chlorantraniliprole | 0.01        | 0.01 | < LOQ  | Chlordane        | 0.1         | 0.1  | < LOQ  |
| Chlorfenapyr        | 0.1         | 0.05 | < LOQ  | Chlorpyrifos     | 0.01        | 0.01 | < LOQ  |
| Clofentezine        | 0.01        | 0.01 | < LOQ  | Clothianidin     | 0.025       | 0.02 | < LOQ  |
| Coumaphos           | 0.01        | 0.01 | < LOQ  | Cyantraniliprole | 0.01        | 0.01 | < LOQ  |
| Cyfluthrin          | 0.4         | 0.2  | < LOQ  | Cypermethrin     | 0.3         | 0.2  | < LOQ  |
| Cyprodinil          | 0.01        | 0.01 | < LOQ  | Daminozide       | 0.05        | 0.05 | < LOQ  |
| Deltamethrin        | 0.5         | 0.2  | < 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        | 0.03  | < 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         | 0.1   | < LOQ  |
| Fipronil                | 0.01        | 0.01 | < LOQ  | Flonicamid                           | 0.025       | 0.02  | < 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         | 0.2   | < 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       | 0.02  | < LOQ  |
| Methoprene              | 1.0         | 0.2  | < LOQ  | Mevinphos                            | 0.025       | 0.02  | < LOQ  |
| MGK-264                 | 0.05        | 0.05 | < LOQ  | Myclobutanil                         | 0.01        | 0.01  | < LOQ  |
| Naled                   | 0.1         | 0.1  | < LOQ  | Novaluron                            | 0.025       | 0.02  | < LOQ  |
| Oxamyl                  | 0.5         | 0.2  | < LOQ  | Paclobutrazol                        | 0.02        | 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        | 0.2  | < 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       | 0.02 | < 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  | 1,2-Dichloroethane  | 1.0         | 1.0 | < LOQ  |
| 1,4-Dioxane                    | 380         | 100 | < LOQ  | 1-Pentanol          | 5000        | 500 | < LOQ  |
| 1,2-Dimethoxyethane            | 100         | 50  | < LOQ  | 2,3-Dimethylbutane  | 30          | 30  | < LOQ  |
| 2-Butanone (Methylethylketone) | 500         | 500 | < LOQ  | 2-Methyl-1-Propanol | 5000        | 500 | < LOQ  |
| 2-Methylpentane                | 30          | 30  | < LOQ  | 2,2-Dimethylbutane  | 30          | 30  | < LOQ  |
| 2-Butanol                      | 5000        | 200 | < LOQ  | 2-Ethoxyethanol     | 160         | 30  | < LOQ  |
| 2-Methylbutane (Isopentane)    | 750         | 200 | < LOQ  | 2-Propanol (IPA)    | 500         | 200 | < LOQ  |

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|----------------------------------|-------------|------|--------|--------------------------------------|-------------|-----|--------|
| Analyte                          | Max Allowed | LOQ  | Result | Analyte                              | Max Allowed | LOQ | Result |
| 2,2-Dimethylpropane (Neopentane) | 750         | 200  | < LOQ  | 3-Methyl-1-Butanol (Isoamyl Alcohol) | 500         | 500 | < LOQ  |
| 3-Methylpentane                  | 30          | 30   | < LOQ  | Acetone                              | 500         | 200 | < LOQ  |
| Acetonitrile                     | 100         | 100  | < LOQ  | Anisole                              | 5000        | 500 | < LOQ  |
| Benzene                          | 1.0         | 1.0  | < LOQ  | Butanes                              | 500         | 400 | < LOQ  |
| n-Butane                         | 500         | 200  | < LOQ  | Chloroform                           | 1.0         | 1.0 | < LOQ  |
| Cyclohexane                      | 3880        | 200  | < LOQ  | Dimethyl sulfoxide (DMSO)            | 5000        | 500 | < LOQ  |
| Ethanol                          | 500         | 200  | < LOQ  | Ethyl acetate                        | 400         | 200 | < LOQ  |
| Ethyl benzene                    | 200         | 200  | < LOQ  | Ethyl ether                          | 500         | 200 | < LOQ  |
| Ethyl formate                    | 5000        | 500  | < LOQ  | Ethylene glycol                      | 620         | 200 | < LOQ  |
| Ethylene oxide                   | 1.0         | 1.0  | < LOQ  | Hexanes                              | 150         | 150 | < LOQ  |
| n-Heptane                        | 500         | 200  | < LOQ  | n-Hexane                             | 30          | 30  | < LOQ  |
| Isobutyl acetate                 | 5000        | 500  | < LOQ  | Isopropyl acetate                    | 310         | 200 | < LOQ  |
| Isopropylbenzene (Cumene)        | 70          | 30   | < LOQ  | Methanol                             | 250         | 200 | < LOQ  |
| Methyl acetate                   | 500         | 500  | < LOQ  | Methyl-t-butyl ether                 | 5000        | 500 | < LOQ  |
| Methylene chloride               | 1.0         | 1.0  | < LOQ  | Methylisobutylketone                 | 4500        | 500 | < LOQ  |
| Methylpropane (Isobutane)        | 500         | 200  | < LOQ  | N,N-Dimethylacetamide                | 1090        | 200 | < LOQ  |
| N,N-Dimethylformamide            | 880         | 200  | < LOQ  | n-Pentane                            | 500         | 200 | < LOQ  |
| n-Propanol                       | 500         | 500  | < LOQ  | Pentanes                             | 750         | 600 | < LOQ  |
| Propane                          | 500         | 200  | < LOQ  | Propyl acetate                       | 500         | 500 | < LOQ  |
| Pyridine                         | 100         | 50   | < LOQ  | Sulfolane                            | 160         | 50  | < LOQ  |
| 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  | < LOQ  |                                      |             |     |        |

Reviewed by Mariah Jensen

Date: 10/20/2025

## Disclaimer:

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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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