CERTIFICATE OF ANALYSIS

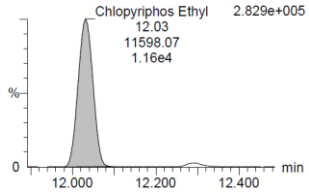
ALKEMIST LABS

12661 HOOVER STREET. GARDEN GROVE, CA 92841 | P. 714-754-4372 | F. 714-668-9972 | WWW.ALKEMIST.COM

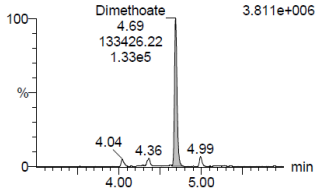
Report Issued To: Dietary Supplement Company
1234 Main Street
Los Angeles CA 90000
USA

Sample Name: Botanical Powdered Extract
Description: Brown Powder
Lot #: 1234567
AL #: 22001ALK
Analysis ID: 8910
Received: 01/01/22

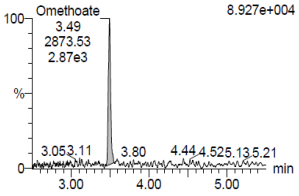
Determination of Pesticide Content USP <561>



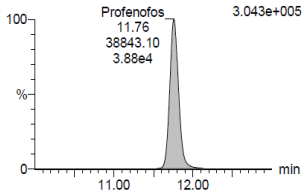
Chlorpyriphos Ethyl



Dimethoate



Omethoate



Profenofos

Compound Name	Amount (mg/kg)	USP <561> Limit (mg/kg)	Result
Acephate*	< 0.1	0.1	Pass
Alachlor **	< 0.05	0.05	Pass
Aldrin and Dieldrin (sum of) **	< 0.05	0.05	Pass
Azimphos Ethyl *	< 0.1	0.1	Pass
Azimphos Methyl *	< 1	1	Pass
Bromophos Ethyl **	< 0.05	0.05	Pass
Bromophos Methyl **	< 0.05	0.05	Pass
Bromopropylate **	< 3	3	Pass
Chlordane (sum of *cis*-, *trans*-, and oxychlordane) **	< 0.05	0.05	Pass
Chlorfenvinphos **	< 0.5	0.5	Pass
Chlorpyriphos Ethyl **	> 0.2	0.2	Fail
Chlorpyriphos Methyl **	< 0.1	0.1	Pass
Chlorthal Dimethyl **	< 0.01	0.01	Pass
Cyfluthrin (sum of) **	< 0.1	0.1	Pass
λ-Cyhalothrin **	< 1	1	Pass
Cypermethrin and isomers (sum of) **	< 1	1	Pass
DDT (sum of *o,p'*-DDE, *p,p'*-DDE, *o,p'*-DDT, *p,p'*-DDT, *o,p'*-TDE, and *p,p'*-TDE) **	< 1	1	Pass
Deltamethrin *	< 0.5	0.5	Pass
Diazinon *	< 0.5	0.5	Pass
Dichlofluanid *	< 0.1	0.1	Pass
Dichlorvos *	< 1	1	Pass
Dicofol **	< 0.5	0.5	Pass
Dimethoate and omethoate (sum of) *	> 0.1	0.1	Fail
Endosulfan (sum of isomers and endosulfan sulphate) **	< 3	3	Pass
Endrin **	< 0.05	0.05	Pass
Ethion *	< 2	2	Pass
Etrimphos *	< 0.05	0.05	Pass
Fenchlorophos (sum of fenchlorophos and fenchlorophos-oxon) **	< 0.1	0.1	Pass
Fenitrothion **	< 0.5	0.5	Pass
Fenpropathrin *	< 0.03	0.03	Pass
Fensulfothion (sum of fensulfothion, fensulfothion-oxon, fensulfothion-oxon sulfone, and fensulfothion sulfone) *	< 0.05	0.05	Pass
Fenthion (sum of fenthion, fenthion-oxon, fenthion-oxon sulfone, fenthion-oxon sulfoxide, fenthion sulfone, and fenthion-sulfoxide) *	< 0.05	0.05	Pass
Fenvalerate **	< 1.5	1.5	Pass
Flucythrinate **	< 0.05	0.05	Pass
τ-Fluvalinate **	< 0.05	0.05	Pass
Fonofos *	< 0.05	0.05	Pass

Analysis Date : xx/xx/xx **Analyzed By: T French** **Authorized By: Anthony Fontana, Laboratory Director**

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Compound Name	Amount (mg/kg)	USP <561> Limit (mg/kg)	Result
Heptachlor (sum of heptachlor, *cis*-heptachlorepoxi heptachlorepoxide) **	< 0.05	0.05	Pass
Hexachlorobenzene **	< 0.1	0.1	Pass
Hexachlorocyclohexane (sum of isomers α-, β-,	< 0.3	0.3	Pass
Lindan (γ-hexachlorocyclohexane) **	< 0.6	0.6	Pass
Malathion and malaoxon (sum of) *	< 1	1	Pass
Mecarbam *	< 0.05	0.05	Pass
Methacriphos *	< 0.05	0.05	Pass
Methamidophos *	< 0.05	0.05	Pass
Methadithion *	< 0.2	0.2	Pass
Methoxychlor **	< 0.05	0.05	Pass
Mirex **	< 0.01	0.01	Pass
Monocrotophos *	< 0.1	0.1	Pass
Parathion-ethyl and paraoxon-ethyl (sum of) *	< 0.5	0.5	Pass
Parathion-methyl and paraoxon-methyl (sum of) **	< 0.2	0.2	Pass
Pendimethalin *	< 0.1	0.1	Pass
Pentachloroanisole **	N/A	0.01	NonA
Permethrin and isomers (sum of) **	< 1	1	Pass
Phosalone *	< 0.1	0.1	Pass
Phosmet *	< 0.05	0.05	Pass
Pipronyl Butoxide *	< 3	3	Pass
Pirimiphos Ethyl *	< 0.05	0.05	Pass
Pirimiphos-methyl (sum of pirimiphos-methyl and *N*-desethyl-pirimiphos-methyl) **	< 4	4	Pass
Procymidone **	< 0.1	0.1	Pass
Profenofos *	> 0.1	0.1	Fail
Prothiophos **	< 0.05	0.05	Pass
Pyrethrum (sum of cinerin I, cinerin II, jasmolin I, jasmolin II, pyrethrin I, and pyrethrin II) *	< 3	3	Pass
Quinalphos *	< 0.05	0.05	Pass
Quintozene (sum of quintozene, pentachloraniline, and methyl pentachlorphenyl sulfide) **	< 1	1	Pass
S-421 **	< 0.02	0.02	Pass
Tecnazene **	< 0.05	0.05	Pass
Tetradifon **	< 0.3	0.3	Pass
Vinclozolin **	< 0.4	0.4	Pass
Bromide, Inorganic (Calculated as Bromide Ion) †	< 125	125	Pass
Dithiocarbamates (Expressed as CS_2) ‡	< 2	2	Pass

Chromatographic Conditions (*):

Method:	ATM-815-0308
Chromatographic Instrument:	UPLC
Ionization Method:	Electrospray Ionization
Mass Spectrometer:	Triple Quadrupole, MRM Mode

Chromatographic Conditions (**):

Method:	ATM-815-0308
Chromatographic Instrument:	GC
Ionization Method:	Atmospheric Pressure Gas Chromatography
Mass Spectrometer:	Triple Quadrupole, MRM Mode

Chromatographic Conditions (†):

Method:	ATM-815-0308
Chromatographic Instrument:	GC
Ionization Method:	Electron Ionization
Mass Spectrometer:	Triple Quadrupole, SIM Mode

Example Report

Analysis Date : xx/xx/xx **Analyzed By: T French** **Authorized By: Anthony Fontana, Laboratory Director**

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Chromatographic Conditions (ǂ):

Method:	ATM-815-0308
Chromatographic Instrument:	GC
Ionization Method:	Electron Ionization
Mass Spectrometer:	Triple Quadrupole, SIM Mode

Sample Preparation (* and **):

Mixed sample well. Ground to a fine powder or composited the contents of 10 capsules if needed. Transferred 500 mg of sample to a 15 mL centrifuge tube. Added 5.0 mL of extraction solvent and vortexed 30 seconds to mix. Sonicated for 30 minutes at room temperature. Let cool and centrifuged for 5 minutes at 4,000 RPM. Transferred 1 mL of supernatant to a dSPE tube and mixed at 15 Hz for 1 minute. Centrifuged at 10,000 RPM for 2 minutes. Transferred to vials for analysis.

Sample Preparation (†):

Mixed sample well. Ground to a fine powder or composited the contents of 10 capsules if needed. Transferred 500 mg of sample to a 15 mL centrifuge tube. Added 4 mL of extraction solvent. Added 2.5 mL of 5% propylene oxide. Vortexed 30 seconds to mix. Let stand at room temperature for 1 hour, shaking vigorously every 15 minutes. Added 3 mL of ethyl acetate and 2 g of ammonium sulfate. Shook for 1 minute and let sit for 10 minutes. Shook for an additional minute and let sit for an additional 10 minutes. Centrifuged is necessary and transferred organic layer to a vial for analysis.

Sample Preparation (ǂ):

Mixed sample well. Ground to a fine powder or composited the contents of 10 capsules if needed. Transferred 500 mg of sample to a screw cap vial. Added 2.5 mL of water, 1 mL of isooctane, and 7.5 mL of tin (II) chloride in hydrochloric acid. Closed tightly with a PTFE lined cap. Vortexed for 30 seconds to mix. Heated in oven for 2 hours, mixing vigorously every 15 minutes. Let cool, centrifuged at 2,000 RPM if needed, and transferred into a vial for analysis.

Report Summary:

Conclusion:	This "Botanical Powdered Extract" test sample does not meet the limits set forth in USP <561> Pesticide Residue Analysis for all pesticides not listed as "non-analyzable".
OOS Reference:	N/A
Notes:	NonA = Non-analyzable
Notebook Reference:	GCEXP00xx p. xxx

Analysis Date : xx/xx/xx **Analyzed By: T French** **Authorized By: Anthony Fontana, Laboratory Director**