

CERTIFICATE OF ANALYSIS



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
United States

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>

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
Azinphos Ethyl *	< 0.1	0.1	Pass
Azinphos 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 <i>cis</i> -, <i>trans</i> -, and oxychlordane) **	< 0.05	0.05	Pass
Chlorfenvinphos **	< 0.5	0.5	Pass
Chlorpyrifos Ethyl **	< 0.2	0.2	Pass
Chlorpyrifos 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 <i>o,p'</i> -DDE, <i>p,p'</i> -DDE, <i>o,p'</i> -DDT, <i>p,p'</i> -DDT, <i>o,p'</i> -TDE, and <i>p,p'</i> -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	Pass
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
Heptachlor (sum of heptachlor, <i>cis</i> -heptachlorepoxyde, and <i>trans</i> -heptachlorepoxyde) **	< 0.05	0.05	Pass
Hexachlorobenzene **	< 0.1	0.1	Pass
Hexachlorocyclohexane (sum of isomers α-, β-, δ-, and ε-) **	< 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



Analysis Date : xx/xx/xx

Analyzed By: Chemist

Authorized By: Manager

The analytical method used has not been verified or validated for this product by Alkemist Labs. This report applies to the sample investigated and is not necessarily indicative of the quality or condition of apparently identical or similar products. This report is for the exclusive use of the party who requested the report and not for public dissemination or use by third parties, including for promotional purposes, without the prior written permission of Alkemist Labs. This report provides technical results for a specific sample and the report shall not be altered, modified, supplemented or abstracted in any manner. Any violation of these conditions renders the report and its results void

Compound Name	Amount (mg/kg)	USP <561> Limit (mg/kg)	Result
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 **	< 0.01	0.01	Pass
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 <i>N</i> -desethyl-pirimiphos-methyl) **	< 4	4	Pass
Procymidone **	< 0.1	0.1	Pass
Profenofos *	< 0.1	0.1	Pass
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 pentachlorophenyl 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

Chromatographic Conditions (‡):

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.

Analysis Date : xx/xx/xx
Analyzed By: Chemist
Authorized By: Manager


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 (±):

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 "Sample Report" test sample meets the limits set forth in USP <561> Pesticide Residue Analysis.
OOS Reference:	N/A
Notes:	N/A
Work Instruction Reference:	xxxxx USP 561 Pesticides



Example
Report

Analysis Date : xx/xx/xx**Analyzed By: Chemist****Authorized By: Manager**

Page 3 of 3

The analytical method used has not been verified or validated for this product by Alkemist Labs. This report applies to the sample investigated and is not necessarily indicative of the quality or condition of apparently identical or similar products. This report is for the exclusive use of the party who requested the report and not for public dissemination or use by third parties, including for promotional purposes, without the prior written permission of Alkemist Labs. This report provides technical results for a specific sample and the report shall not be altered, modified, supplemented or abstracted in any manner. Any violation of these conditions renders the report and its results void