



# Specification Sheet

Date Revised: 01/04/2016

<b>Product: MACA Powder Concentrate 4:1 Product Name : New-Maca4Mega4:1®</b>		
<b>Product Code: M4M4:1®</b>		<b>Technical Administrator: Mary Gabriel</b> <i>Mary Gabriel</i>
<b>PLANT SPECIES:</b> Lepidium meyenii walp	<b>Part used:</b> Root	
<b>SOURCE:</b> Peru Premium Extracts, Lima, Peru	<b>Harvest Time:</b> July-Oct	
<i>Complies with all current USP/NF</i>		
<b>Standardization:</b> Water & Ethanol (50/50)	<b>Residue solvent:</b> <50ppm (USP<467>)	
<b>Item</b>	<b>Specification</b>	<b>Method</b>
<b>Appearance:</b>	Cream color powder	Visual
<b>Identity :</b>	spectrum must match Maca powder IR reference	Botanical ID, chain of custody, HPTLC
<b>Taste /Odor:</b>	Characteristic	

**Active Ingredients**

Glucosinolates

HPLC

**Concentration**

4:1

**Pesticide Evaluation**

Organophosphorus Insecticides

GC-MS, USP 36,  
NF31

- Diechlorvos ND
- Fonofos “
- Diazanon
- Parathion-methyl
- Chlorpyrifos-mythyl “
- Pirimiphos-mythyl
- Malathion
- Parathion
- Chlorpyrifos «
- Methidathion
- Ethion
- Carbophenothion
- Azinphos-methyl
- Phosalone

**Organochlorine & Pyrethroid Insecticides**

ND

GC-MS,USP36,  
NF 31

- alfar-Hexachlorocyclohexane “
- Hexachlorobenzene
- bata-Haxachlorocyclohexane
- Lindane
- gamma-Haxachlorocyclohexan
- Heptachlor
- Aldrin
- Heptachlor epoxide ND
- o' p'-DDE
- alfar-Endosulfan
- Dieldrin
- p' p' -DDE
- Endrin
- Endosulfan

GC-MS,USP36NF31

**Specification sheet**

<b>Product Code: M4M4:1®</b>	<b>Date Revised: 01/04/2016</b>
<b>Specification</b>	<b>Method of Analysis</b>

**Carbophenothion** ND GC-MS, USP36NF31

**Organochlorine & Pyrethroid**

**Insecticides**

*p' p' -DDT* ND  
 Permethrin  
 Trans-Permethrin  
 Cypermethrin  
 Fenvalerate  
 Deltamathrin

<b>Heavy metals / Must Meet USP Limits &lt;10mg/kg</b>	<b>Actual Results of crop</b>	<b>USP method 231</b>
Arsenic < 0.50mg/kg	<0.20mg/kg	ICP/MS
Cadmium < 0.50mg/kg	<0.50mg/kg	AICP05A
Copper < 3.00mg/kg***	<2.00mg/kg	ICP/MS
Lead < 0.20mg/kg	<0.20mg/kg	ICP/MS
Mercury < 0.50mg/kg	<0.50mg/kg	ICP/MS
Zinc < 3.00mg/kg***	<2.00mg/kg	ICP/MS

\*\*\* Specifications on zinc & copper were set based on tests results of several samples of new crop.  
 No FDA and/or USP limits are posted or determined. Specifications are only listed for information purposes & may exceed limits as garlic is a natural product & nothing is added in its process.

**Bulk Density(untapped)** 0.42-0.62 g/ml or cc USP36NF31

**Moisture** 8.0% max USP36NF31.

**Granulation/Mesh**

% on US #35 0% max USP36NF31  
 % on US #45 0% min-1% max USP36NF31  
 % on US # 80 10% min-15% max USP36NF31  
 % on US #100 40% min-50% max USP36NF31

**Microbiological**

Total plate Count <50,000 cfu/g (Same as USP<2021, 2022>) AOAC 966.23  
 Yeast and Mold <100 cfu/g FDA-BAM 7<sup>th</sup> ed.  
 Coliforms <20 cfu/g AOAC 966.23  
 E.Coli negative AOAC 966.23  
 Pseudomonas negative AOAC /BAM  
 Salmonella negative AOAC /BAM  
 Staph Aureus negative AOAC /BAM

**Ingredients:** 100% concentrated Maca root powder4:1, no chemicals or additives. No ETO treatment, and no irradiation.

**Ingredients declaration:** Maca concentrate 4:1 55-65%  
 Maltodextrin 35-45%

**Storage Conditions & shelf life:**

Store in a cool, dry place, do not freeze. Shelf life is three (3) yrs if handled properly.