

## Specification Sheet - Revised 09/01/2008

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|   |                                    |
|---|------------------------------------|
| PRODUCT: New-Gar® deodorized 12000 Allicin powder garlic      | (U)                                |
| PRODUCT CODE No.: NG12000P                                    | Technical Administrator: Yang Xian |
| PLANT SPECIES: <i>Allium Sativum</i>                          | <b>Yang Xian</b>                   |
| Part used: Bulb   | Complies with all current USP/NF   |
| SOURCE/partner: Harmoni Zhengzhou International, Henan, China | HARVEST TIME: Sept/Oct             |

| Item  | Specification             | Method of Analysis                                  |
|---|---------------------------|---|
| Appearance:   | White to light tan powder | Visual  |
| Identity : spectrum must match garlic powder IR reference |                           | Botanical ID, chain of custody, Organoleptic, FT-IR |
| <b>Active Ingredients</b>                                 | <b>Specification</b>      | <b>Method of Analysis</b>                           |
| Allicin Potential   | Min. 12,000 ppm           | C-18 HPLC   |
| Alliin *  | 26,400 ppm                | “   |
| Gamma-glutamylcysteines *                                 | 9,600 ppm                 | “   |
| Total Thiosulfinates *                                    | 12,000 ppm                | “   |
| Total Sulfur  | VARIABLES                 | AOAC 990.28   |
| <b><u>Pesticide Evaluation</u></b>                        |                           |   |
| Organophosphorus Insecticides                             |                           | GC-MS, USP31, NF26                                  |
| 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, USP31, NF26                                  |
| <i>alfar</i> -Hexachlorocyclohexane                       | “                         |   |
| Hexachlorobenzene   |                           |   |
| <i>bata</i> -Hexachlorocyclohexane                        |                           |   |
| Lindane   |                           |   |
| <i>gamma</i> -Hexachlorocyclohexan                        |                           |   |
| Heptachlor  |                           |   |
| Aldrin  |                           |   |
| Heptachlor epoxide  | ND                        |   |

|  |                      |                           |
|--|----------------------|---------------------------|
| <b>PRODUCT: Deodorized New-Gar ®12000 ppm allicin powder Garlic (NG12000P)</b> |                      |                           |
|  | <b>Specification</b> | <b>Method of Analysis</b> |

**Pesticide Evaluation**

|                             |    |              |
|-----------------------------|----|--------------|
| <i>o' p'</i> -DDE           | ND | GC_USP31NF26 |
| alfar-Endosulfan            |    |              |
| Dieldrin                    |    |              |
| <i>p' p'</i> -DDE           |    |              |
| Endrin                      |    |              |
| Endosulfan                  |    |              |
| <i>o' p'</i> -DDT           |    |              |
| Carbophenothion             |    |              |
| Organochlorine & Pyrethroid | “  |              |
| Insecticides                |    |              |
| <i>p' p'</i> -DDT           |    |              |
| Permethrin                  |    |              |
| <i>Trans</i> -Permethrin    |    |              |
| Cypermethrin                |    |              |
| Fenvalerate                 |    |              |
| Deltamathrin                |    |              |

**Heavy metals**

|         |            |                |
|---------|------------|----------------|
|         | <5mg/kg    | USP method 231 |
| Arsenic | <0.50mg/kg |                |
| Cadmium | <0.50mg/kg |                |
| Copper  | <0.50mg/kg |                |
| Lead    | <0.50mg/kg |                |
| Mercury | <0.50mg/kg |                |
| Zinc    | <0.50mg/kg |                |

**Bulk Density**

0.6-0.80 g/ml or cc

**Moisture**

7.0% max (although we aim for <6% )

**Granulation/Mesh**

|                |                 |            |
|----------------|-----------------|------------|
| % on US #35    | 0% max          | A.D.O.G.A. |
| % on US #45    | 0% min-1% max   | A.D.O.G.A. |
| % on US # 80   | 10% min-15% max | A.D.O.G.A. |
| % thru US #100 | 40% min-50% max | A.D.O.G.A. |

**Microbiological**

|                   |                                    |                             |
|-------------------|------------------------------------|-----------------------------|
| Total plate Count | <50,000 cfu/g (Same as USP method) | AOAC 966.23                 |
| Yeast and Mold    | <300 /g                            | FDA-BAM 7 <sup>th</sup> ed. |
| Coliforms         | <40 /g                             | AOAC 966.23                 |
| E.Coli            | negative                           | AOAC 966.23                 |
| Pseudomonas       | negative                           | AOAC /BAM                   |
| Salmonella        | negative                           | AOAC /BAM                   |
| Staph Aureus      | negative                           | AOAC /BAM                   |

**Actives Testing** : Each batch is tested for Allicin potential, \*all other actives results are by input  
**Ingredients**: 100% garlic, no chemicals or additives, ETO Treatment, & No Irradiation.

**pesticides & H/M are tested at US labs twice/yr : early & late crop**

**Storage Conditions & shelf life:**

Store in a cool, dry place, do not freeze. Shelf life is 2-3 yrs depending on the value of allicin potential  
 & based on a stability study.