

## Xi'an Green Spring Technology Co.,Ltd

## Certificate of Analysis

| Product Name          | Valerian Extract         |                 |              |
|-----------------------|--------------------------|-----------------|--------------|
| Botanical Source      | Valeriana officinalis L. | Plant part used | Root         |
| Batch Number          | 2024041102GS             | Quantity        | 550kgs       |
| Manufacture Date      | Apr.11,2024              | Analysis Date   | Apr.13,2024  |
| Item                  | Standard                 | Test Result     | Test Method  |
| Valerienic Acid       | ≥0.80%                   | 0.84%           | HPLC         |
| Physical & Chemical   |                          |                 |              |
| Appearance            | Dark Brown Fine Powder   | Complies        | Visual       |
| Odor & Taste          | Characteristic           | Characteristic  | Organoleptic |
| Particle Size         | 98% pass 80mesh          | Complies        | USP<786>     |
| Extraction solvent    | Ethanol & Water          | Complies        |              |
| Loss on Drying        | ≤5.00%                   | 1.98%           | USP<731>     |
| Ash                   | ≤10.00%                  | 2.74%           | USP<281>     |
| Bulk Density          | 40~60g/100ml             | 40g/100ml       | USP<616>     |
| Tap Density           | 60~90g/100ml             | 60g/100ml       | USP<616>     |
| Solvents Residue      | Meet USP Requirements    | Complies        | USP<467>     |
| Pesticides Residue    | Meet USP Requirements    | Complies        | USP<561>     |
| Heavy Metal           |                          |                 |              |
| As                    | ≤2.0ppm                  | 0.347ppm        | ICP-MS       |
| Pb                    | ≤3.0ppm                  | 0.391ppm        | ICP-MS       |
| Cd                    | ≤1.0ppm                  | 0.046ppm        | ICP-MS       |
| Hg                    | ≤0.1ppm                  | 0.078ppm        | ICP-MS       |
| Microbiological Test  |                          |                 |              |
| Total Plate Count     | ≤10,00cfu/g              | 10cfu/g         | AOAC         |
| Mold and Yeast        | ≤1,00cfu/g               | 20cfu/g         | AOAC         |
| E.Coli                | Negative                 | Negative        | AOAC         |
| Salmonella            | Negative                 | Negative        | AOAC         |
| Staphylococcus aureus | Negative                 | Negative        | AOAC         |

Storage: Store in cool and dry places. Keep away from strong light and heat

Packing: By 25kgs/Drum, inner by double plastic bag

Shelf Life: 36 months under the above condition, and in it's original package

Quality Assurance: Tiang Yan Yalk Control