

**Certificate of Analysis**

| <b>Product Information</b>          |                                                                     |                  |                     |
|-------------------------------------|---------------------------------------------------------------------|------------------|---------------------|
| Product Name                        | Valerian Extract Powder                                             | Report Number    | VEL20201134         |
| Botanical Name                      | Valeriana officinalis L.                                            | Manufacture Date | 2020/11/09          |
| Used Part                           | Root                                                                | Analysis Date    | 2020/11/14          |
| Batch Number                        | VEL201109                                                           | Report Date      | 2020/11/19          |
| Batch Quantity                      | 500Kg                                                               | Expiry Date      | 2023/11/08          |
| <i>Test Items</i>                   | <i>Specifications</i>                                               | <i>Result</i>    | <i>Test Methods</i> |
| <b>Active Ingredients</b>           |                                                                     |                  |                     |
| Assay                               | ≥0.8% Valerianic Acid                                               | 0.95%            | HPLC                |
| <b>Physical &amp; Chemical Data</b> |                                                                     |                  |                     |
| Appearance                          | Brown Fine Powder                                                   | Conforms         | Visual              |
| Odor and Taste                      | Characteristic                                                      | Conforms         | Organoleptic        |
| Sieve analysis                      | 90% through 80 mesh                                                 | Conforms         | 80 Mesh Screen      |
| Loss on Drying                      | ≤5.0 %                                                              | 3.11%            | 105°C/2 hrs         |
| Total Ash                           | ≤5.0 %                                                              | 0.63%            | GB 5009.4-2016      |
| Bulk Density                        | 40~60g/100mL                                                        | 49.8g/100mL      | GB/T 18798.5        |
| Tap Density                         | 50~80g/100mL                                                        | 50.9g/100mL      | GB/T 18798.5        |
| <b>Contaminants</b>                 |                                                                     |                  |                     |
| Lead (Pb)                           | <3.0mg/kg                                                           | Conforms         | ICP-MS              |
| Arsenic (As)                        | <2.0mg/kg                                                           | Conforms         | ICP-MS              |
| Cadmium (Cd)                        | <1.0mg/kg                                                           | Conforms         | ICP-MS              |
| Mercury (Hg)                        | <0.1mg/kg                                                           | Conforms         | ICP-MS              |
| <b>Microbiological</b>              |                                                                     |                  |                     |
| Total Aerobic Count                 | ≤1000cfu/g                                                          | 200cfu/g         | GB 4789.2           |
| Yeast & Moulds                      | ≤100cfu/g                                                           | 35cfu/g          | GB 4789.15          |
| E-Coli                              | Negative                                                            | Conforms         | GB 4789.3           |
| Salmonella                          | Negative                                                            | Conforms         | GB 4789.4           |
| Staphylococcus Aureus               | Negative                                                            | Conforms         | GB 4789.10          |
| <b>Conclusion</b>                   |                                                                     |                  |                     |
| Conclusion                          | To be complied with in-house Specification                          |                  |                     |
| Shelf Life                          | 3 years when properly stored                                        |                  |                     |
| Storage                             | Store in cool & dry place, not freeze. Keep away from strong light. |                  |                     |

**Remarks:** This product is natural, the color vary from batch to batch.

Tested by: 张丽娟

Checker: 李明

Approved:

