

## 检测报告 CERTIFICATE OF ANALYSIS

|                            |                                                                                                                         |                        |               |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------|------------------------|---------------|
| 产品名称<br>Product Name:      | 盐酸小檗碱<br>Berberine hydrochloride                                                                                        | 参考标准<br>Ref. Standard: | CP 2005       |
| CAS NO.:                   | 633-65-8                                                                                                                | 使用部位 Used Part:        | 皮 Bark        |
| 批号 Batch Number:           | 20250918                                                                                                                | 生产日期 Manuf. Date:      | Sep. 18, 2025 |
| 数量 Quantity :              | 100kg                                                                                                                   | 有效期至 Expire Date:      | Sep. 17, 2027 |
| 储存条件<br>Storage Condition: | 储存在密闭、干燥、室温恒定、无阳光直射的地方。<br>Store in a well-closed and dry place with constant room temperature and Non-direct sunlight. |                        |               |

| 项目 ITEM                                  | 标准 SPECIFICATION                                     | 结果 RESULT   | 方法 METHOD       |
|------------------------------------------|------------------------------------------------------|-------------|-----------------|
| 含量 Assay                                 | ≥97.0%                                               | 97.6%       | CP2005          |
| 外观 Appearance                            | 黄色粉末无臭，味苦<br>Yellow powder odorless,<br>taste bitter | 符合 Conforms | 感官 Organoleptic |
| 鉴别 Identification                        |                                                      |             |                 |
| 颜色反应 A<br>Color reaction A               | 呈正反应 Positive                                        | 符合 Conforms | CP2005          |
| 颜色反应 B<br>Color reaction B               | 呈正反应 Positive                                        | 符合 Conforms | CP2005          |
| 颜色反应 C<br>Color reaction C               | 呈正反应 Positive                                        | 符合 Conforms | CP2005          |
| IR                                       | 对应于红外参考光谱<br>Corresponds to IR<br>ref.spectrum       | 符合 Conforms | CP2005          |
| 氯化物 Chloride                             | 呈正反应 Positive                                        | 符合 Conforms | CP2005          |
| 理化指标 Physical & Chemical Characteristics |                                                      |             |                 |
| 粒度 Particle size                         | 100% pass 80 mesh                                    | 符合 Conforms | 筛分 Screening    |
| 炽灼残渣 Residue on ignition                 | ≤0.2%                                                | 0.15%       | GB 5009.4       |
| 干燥失重 Loss on Drying                      | ≤12.0%                                               | 11.7%       | GB 5009.3       |
| 松密度 Bulk density                         | ≥0.3g/ml                                             | 0.38g/ml    | GB 18798.5      |
| 其他生物碱 Other alkaloids                    | 满足要求<br>Meet the requirements                        | 符合 Conforms | CP2005          |

|                                    |                                           |                     |             |
|------------------------------------|-------------------------------------------|---------------------|-------------|
| 多环芳烃 Polycyclic aromatic           | 不得检出 Not detected                         | 未检出<br>Not detected | GBZ/T 160.1 |
| 重金属 Heavy metals                   | ≤10.0ppm                                  | 符合 Conforms         | GB 5009.74  |
| 铅 Lead(Pb)                         | ≤1.0ppm                                   | 符合 Conforms         | GB 5009.12  |
| 砷 Arsenic(As)                      | ≤1.0ppm                                   | 符合 Conforms         | GB 5009.11  |
| 镉 Cadmium(Cd)                      | ≤1.0ppm                                   | 符合 Conforms         | GB 5009.15  |
| 汞 Mercury(Hg)                      | ≤0.1ppm                                   | 符合 Conforms         | GB 5009.17  |
| <b>微生物指标 Microbiological Tests</b> |                                           |                     |             |
| 菌落总数 Total Plate Count             | ≤1000cfu/g                                | 符合 Conforms         | GB 4789.2   |
| 酵母&霉菌 Yeast & Mold                 | ≤100cfu/g                                 | 符合 Conforms         | GB 4789.15  |
| 大肠杆菌 E.Coli.                       | 阴性 Negative                               | 阴性 Negative         | GB 4789.38  |
| 沙门氏菌 Salmonella                    | 阴性 Negative                               | 阴性 Negative         | GB 4789.4   |
| 葡萄球菌 Staphylococcus                | 阴性 Negative                               | 阴性 Negative         | GB 4789.10  |
| 结论 Conclusion:                     | 符合 CP2005 标准 Conforms to CP2005 standard. |                     |             |

Tested by: Tiantian Wang

Checked by: Hong Chen

Approved by: Yulan Liu

