



Guilin Layn Natural Ingredients Corp. | Stock Code: 002166
Headquarters: 2777 E. Jinxiu Road, Building 40, Pudong, Shanghai, China 201206
Manufacturing Site: 19 S. Renmin Road, Lingui, Guilin, Guangxi, China 541199
 Website: www.layncorp.com
 E-mail: info@layn.com.cn

Layn USA, Inc.
 20250 Acacia Street, Suite 200
 Newport Beach, CA 92660
 Phone: 1-949-387-6840
 E-mail: info@layn-usa.com

Layn Europe SRL.
 Via Pietro Paleocapa 2/2
 17100 Savona, Italy
 Phone: 39-3487026090
 E-mail: info@layn.eu

CERTIFICATE OF ANALYSIS

Version# LAYN(JY) 701-C0

| | | | |
|------------------------------------|--|----------------------|---------------------|
| Product Name: | Shou Wu P.E. | Item Code: | HSW02 |
| Common Name: | Shou Wu Extract | Batch Number: | HSW02-170611 |
| Raw Material: | Dried root | Manufacture Date: | Jun-11-2017 |
| Botanical Name(Raw Material): | Polygonum multiflorum | Report Date: | Jun-16-2017 |
| Country of Origin (Raw Material): | China | Retesting Date: | Jun-10-2019 |
| Country of Origin (Manufacturing): | China | Extraction Solvent: | Ethanol & Water |
| Declarations: | Non-GMO, Non-Irradiated, Non-Eto | Carrier: | None |
| Storage: | Storage at room temperature, seal tightly, keep from moisture and strong light | | |

| PARAMETER | SPECIFICATION | METHOD | RESULT |
|---|-----------------------------------|--|----------|
| <u>Organoleptic Test</u> | | | |
| Color | Brown | Layn Sensory Testing Method | Complies |
| Appearance | Fine powder | Layn Sensory Testing Method | Complies |
| Odor & Taste | Characteristic without off-flavor | Layn Sensory Testing Method | Complies |
| Solubility, % | ≥95 | 25% water solution | 98.30 |
| <u>Analytical Data</u> | | | |
| THSG, % | 15-20 | Layn THSG Testing Method | 17.62 |
| Polyphenol, % | 30-50 | Layn Polyphenol Testing Method | 36.88 |
| Emodin, % | < 0.1 | Layn Emodin Testing Method | < 0.1 |
| Total Anthraquinones, % | < 0.5 | Layn Total Anthraquinones Testing Method | < 0.5 |
| Anthraquinone, % | < 0.1 | Layn Total Anthraquinones Testing Method | < 0.1 |
| Loss on Drying, % | ≤ 8.0 | GB 5009.3 | 1.98 |
| Ash, % | ≤ 2.0 | GB 5009.4 | 1.88 |
| pH (| 4.5-7 | 1% Water Solution | 5.90 |
| <u>Solvents Residue</u> , mg/kg | ≤ 0.5 | CP 2015 0861 | Complies |
| <u>Heavy Metals</u> | | | |
| *Arsenic (As), mg/kg | ≤ 2.0 | GB 5009.268 | 0.13 |
| *Lead (Pb), mg/kg | ≤ 5.0 | GB 5009.268 | 0.02 |
| *Cadmium (Cd), mg/kg | ≤ 0.3 | GB 5009.268 | 0.001 |
| *Mercury (Hg), mg/kg | ≤ 0.2 | GB 5009.268 | ND |
| <u>Microbiological Control</u> | | | |
| Total Aerobic Plate Count, cfu/g | ≤ 1,000 | GB 4789.2 | 150 |
| Yeast & Mold, cfu/g | ≤ 100 | GB 4789.15 | <10 |
| Coliforms, cfu/g | ≤ 10 | GB 4789.3 | <10 |
| *Escherichia Coli, 25g | Negative | GB 4789.38 | Complies |
| *Staphylococcus Aureus, 25g | Negative | GB 4789.10 | Complies |
| *Salmonella, 25g | Negative | GB 4789.4 | Complies |
| <u>Note:</u> | | | |
| The item marked with * is tested at a set frequency based on risk assessment. | | | |
| Layn Internal Standard: Shou Wu Extract Quality Standard | | | |
| GB: Chinese National Standard | | | |
| CP: Chinese Pharmacopoeia | | | |



Reviewed by: Luo Yongwei (QC Manager)

Approved by: Zheng Chuanqi (QA Manager)