

### CERTIFICATE OF ANALYSIS

**Product Name:** Silybin (Milk Thistle P.E.)      **Latin Name:** Silybum marianum (L.) Gaertn  
**Lot No.:** BT230907      **Quantity:** 1000kgs      **Packing:** 20kg Cardboard Drum  
**Extraction Solvent:** Acetone      **Manu. Date:** 09/07/2023      **Expiry Date:** 09/06/2026

Test items	Specification and Standards	Results
<b>Appearance</b>	Amorphous Powder	Conforms
<b>Colour</b>	Yellow to Yellowish-Brown	Conforms
<b>Odour</b>	Slight, Specific	Conforms
<b>Solubility</b>		
- in Water	Practically Insoluble	Conforms
- in Methanol and Acetone	Soluble	Conforms
<b>Identification</b>	A. Thin-Layer Chromatographic Identification Test B. HPLC Identification Test	Conforms
<b>Sulphated Ash</b>	NMT 0.5%	0.22%
<b>Heavy metals</b>	NMT 10 PPM	Conforms
- Lead	NMT 2.0 PPM	0.05PPM
- Cadmium	NMT 1.0 PPM	0.005PPM
- Mercury	NMT 0.1 PPM	0.005PPM
- Arsenic	NMT 1.0 PPM	0.005PPM
<b>Loss On Drying (2 Hours 105 °C)</b>	NMT 5.0%	2.45%
<b>Powder size</b>		
Mesh 80	NLT100%	Conforms
<b>Assay of Silymarin (UV test, per cent, Standard in House)</b>	Min. 80%	92.87%
<b>Assay of Silymarin (Test by HPLC)</b>		96.41%
- sum of Silycristin and Silydianin		0.77%
- sum of Silybin A and Silybin B		95.31%
- sum of Isosilybin A and Isosilybin B		0.33%
<b>Residual Solvents</b>		
- N-hexane	NMT 290 PPM	1.191PPM
- Acetone	NMT 5000 PPM	2234.441PPM
- Ethanol	NMT 5000 PPM	4560PPM
<b>Pesticide Residues</b>	USP43<561>	Conforms
<b>Microbiological Quality (Total viable aerobic count)</b>		
- Bacteria, CFU/g, not more than	10 <sup>3</sup>	Conforms
- Moulds and yeasts, CFU/g, not more than	10 <sup>2</sup>	Conforms
- E.coli, Salmonella, S. aureus, CFU/g	Absence	Does not Contain

Storage: In Tight, Light-resistant and Dry Place. Avoid Direct Sunshine. *Country of Origin: China*

**Analyst:** Xu Wenjia

**Checker:** Su Xinyin

**Q.C.:** Liu Zhongping