


Specification Sheet

Cistanche Tubulosa Extract (Echinacoside 22%, Acteoside 8%)

| | | |
|--|---|--------------------------------|
| Item No.: | CT001 | |
| Country of Origin: | P. R. China | |
| Botanic Name: | <i>Cistanche tubulosa</i> (Schenk) Wight | |
| Plant Parts: | Fleshy Stems with Scale Leaves | |
| Shelf Life: | Three Years | |
| Sterilization: | Non-Irradiated/Non-ETO/Treat by Heat Only | |
| Test | Specification | Method |
| Identification | | |
| Echinacoside | ≥ 22.0% | HPLC |
| Acteoside | ≥ 8.0% | HPLC |
| Physical/Chemical | | |
| Identification | Positive | TLC |
| Appearance | Yellow brown powder | Visual |
| Odor | Characteristic | Organoleptic |
| Powder Size (USP) | ≥ 95% through 80 mesh | USP #80 Sieve |
| Bulk Density | 0.40 – 0.60 g/mL | USP40-NF35<616> |
| Tapped Density | 0.50 – 0.80 g/mL | USP40-NF35<616> |
| Loss on Drying | ≤ 5.0% | USP40-NF35<731> |
| Residue on Ignition | ≤ 5.0% | USP40-NF35<281> |
| Residual Solvents | USP<467> | USP40-NF35<467> |
| Pesticide Residues | USP<561> | USP40-NF35<561> |
| Aflatoxins | ≤ 20 ppb | USP40-NF35<561> |
| Heavy Metals | | |
| Total Heavy Metals | ≤ 10 µg/g | USP40-NF35<231> |
| Arsenic (As) | ≤ 1.0 µg/g | ICP-MS |
| Cadmium (Cd) | ≤ 0.5 µg/g | ICP-MS |
| Lead (Pb) | ≤ 1.0 µg/g | ICP-MS |
| Mercury (Hg) | ≤ 0.5 µg/g | ICP-MS |
| Microbiology | | |
| Total Plate Count | ≤ 1,000 cfu/g | USP40-NF35<2021> |
| Molds and Yeasts | ≤ 100 cfu/g | USP40-NF35<2021> |
| Total Coliforms | ≤ 10 cfu/g | USP40-NF35<2021> |
| <i>Salmonella</i> | Absence | USP40-NF35<2022> |
| <i>E. Coli</i> | Absence | USP40-NF35<2022> |
| <i>Staphylococcus aureus</i> | Absence | USP40-NF35<2022> |
| Quality Approved By:  | | Issued Date: <u>01-01-2018</u> |