

# CERTIFICATE OF ANALYSIS

## Pine Bark Extract 95% Proanthocyanidins(UV)

Batch No.: SC2020508 Manufacture Date: 20200508 Expiry Date: 20230507

### General Information

|                  |                       |                   |               |
|------------------|-----------------------|-------------------|---------------|
| Part Used        | Bark                  | Solvents Used     | Water&Ethanol |
| Botanical Source | <i>Pinus pinaster</i> | Country Of Origin | China         |

| ITEMS | SPECIFICATION | METHOD | TEST RESULTS |
|-------|---------------|--------|--------------|
|-------|---------------|--------|--------------|

### Physical&Chemical Data

|            |                |              |         |
|------------|----------------|--------------|---------|
| Color      | Red Brown      | Organoleptic | Conform |
| Odour      | Characteristic | Organoleptic | Conform |
| Appearance | Fine Powder    | Organoleptic | Conform |

### Analytical Quality

|                   |                          |                  |           |
|-------------------|--------------------------|------------------|-----------|
| Identification    | Identical to R.S. sample | HPTLC            | Identical |
| Proanthocyanidins | ≥95.0%                   | UV               | 98.75%    |
| Sieve analysis    | 100 % through 80 mesh    | Eur.Ph. <2.9.12> | Conform   |
| Loss on Drying    | ≤5.0 %                   | Eur.Ph. <2.8.17> | 2.12 %    |
| Total Ash         | ≤10.0 %                  | Eur.Ph. <2.4.16> | 0.75 %    |

### Contaminants

|                    |                       |                        |              |
|--------------------|-----------------------|------------------------|--------------|
| Lead (Pb)          | ≤3.0 mg/kg            | Eur.Ph. <2.2.58>ICP-MS | 0.0171 mg/kg |
| Arsenic (As)       | ≤2.0 mg/kg            | Eur.Ph. <2.2.58>ICP-MS | 0.414 mg/kg  |
| Cadmium (Cd)       | ≤1.0 mg/kg            | Eur.Ph. <2.2.58>ICP-MS | 7.0E-4 mg/kg |
| Mercury (Hg)       | ≤0.1 mg/kg            | Eur.Ph. <2.2.58>ICP-MS | 0.0352 mg/kg |
| Solvents Residue   | Meet Eur.Ph. <5.4>    | Eur.Ph. <2.4.24>       | Conform      |
| Pesticides Residue | Meet Eur.Ph. <2.8.13> | Eur.Ph. <2.8.13>       | Conform      |

### Microbiological

|                   |              |                  |           |
|-------------------|--------------|------------------|-----------|
| Total Plate Count | ≤10000 cfu/g | Eur.Ph. <2.6.12> | 30 cfu/g  |
| Yeast &Mold       | ≤1000 cfu/g  | Eur.Ph. <2.6.12> | <10 cfu/g |
| E.Coli.           | Negative     | Eur.Ph. <2.6.13> | Conform   |
| Salmonella        | Negative     | Eur.Ph. <2.6.13> | Conform   |

### General Status

|                 |      |                 |     |
|-----------------|------|-----------------|-----|
| Non-Irradiation | ≤700 | EN <13751:2002> | 278 |
|-----------------|------|-----------------|-----|

### Packing&Storage

Packed in paper-drums and two plastic-bags inside;  
N.W:25kgs, I.D.35×H51cm;  
Store in a well-closed container Away from moisture,light, oxygen

### Shelf life

36 months under the conditions above and in its original packaging.



