品鸿生物科技
Pinhon Biotechnology

TECHNICAL DATA SHEET

PINHONBIO® TECA 95%

1. Product Overview

PINHONBIO® TECA 95% is a highly purified, titrated fraction obtained from dried Centella asiatica material. It is standardized to at least 95% total triterpenic actives, comprising asiaticoside and the free genins asiatic acid and madecassic acid. The material is supplied as a cosmetic-grade powder for professional formulation use.

2. Product Identification

Product name	PINHONBIO® TECA 95%
Product description	Titrated extract of Centella asiatica
INCI name on supplied COA	CENTELLA ASIATICA EXTRACT
Botanical source	Centella asiatica (L.) Urban
Plant part	Dried whole plant
Extraction solvent	Ethanol / water
Principal constituents	Asiaticoside; asiatic acid; madecassic acid
Grade	Cosmetic grade
Geographical availability	Global

3. Active Component Identity

Component	CAS / EC	Formula	Molecular weight	Specification
Asiaticoside	16830-15-2 / 240-851-7	C48H78O19	959.12 g/mol	36-44%
Asiatic acid	464-92-6 / 482-720-9	C30H48O5	488.70 g/mol	Included in free genins
Madecassic acid	18449-41-7 / 606-031-1	C30H48O6	504.70 g/mol	Included in free genins

Free genins (asiatic acid plus madecassic acid): 54-66% combined. Total triterpenic actives: not less than 95.0%.

4. Functions and Applications

- Skin-conditioning ingredient for cosmetic products intended to support a soothed, resilient and well-maintained skin appearance.
- Suitable for serums, creams, lotions, masks, after-sun products and scalp or hair-care formulations.
- Cosmetic claims and finished-product safety must be supported by testing of the final formulation in the destination market.

5. Technical Specification

Test	Specification	Method
Asiaticoside	36-44%	HPLC
Free genins	54-66%	HPLC
Total triterpenic actives	>=95.0%	Calculated from HPLC results
Appearance and color	Off-white to white powder	Visual
Odor	Characteristic	Organoleptic
Taste	Characteristic	Organoleptic
Identification	Positive	TLC
Ash	<2.0%	GB 5009.4
Loss on drying	<5.0%	GB 5009.3
Residual solvent	<=2,000 ppm	CP 2020
Particle size	>=98% through 80 mesh	CP 2020
Lead	<1 ppm	GB 5009.12
Arsenic	<1 ppm	GB 5009.11
Mercury	<0.3 ppm	GB 5009.17
Cadmium	<1 ppm	GB 5009.15
Total plate count	<=1,000 CFU/g	GB/T 4789.2-2003
Yeast and mold	<=100 CFU/g	GB/T 4789.15-2003
Coliform	Negative	GB/T 4789.3-2003
Salmonella	Negative	GB/T 4789.4-2003
Staphylococcus aureus	Negative	GB/T 4789.10-2003

6. Formulation Guidance

Suggested evaluation level	0.1-0.5%; 0.2% is a common starting point for highly purified TECA grades.
Solubility	Practically insoluble in water. More compatible with alcohols and polyols such as propylene glycol or butylene glycol.
Processing	Premix in a suitable solvent or dispersing phase. Confirm clarity, precipitation risk and stability in the actual formula before scale-up.
Addition	Add using the lowest practical heat exposure and sufficient mixing. Processing conditions depend on the selected solvent system.

7. Packaging Storage and Shelf Life

Packaging	Double-layer plastic bag inside a neutral cardboard drum, or agreed equivalent.
Storage	Keep tightly closed in a cool, dry and shaded place. Protect from moisture, heat and direct light.
After opening	Reseal promptly and minimize exposure to air and humidity.
Shelf life	24 months in unopened original packaging when stored as recommended.

Regulatory note: The INCI name above follows the supplied COA. Highly purified TECA materials may also be described by the individual constituent INCI names Asiaticoside, Madecassic Acid and Asiatic Acid. The customer must confirm the correct declaration and permitted use for each destination market.

Information sources: supplied PINHONBIO COA; EMA public statement and assessment report on Centella asiatica; Cosmetic Ingredient Review safety assessment; PubChem and ChemSrc identity records; public technical information for highly purified TECA grades.