品鸿生物科技
Pinhon Biotechnology

Technical Data Sheet

PINHONBIO® Aescin (Escin) 98%

TDS | Assay ≥98.0% on dried basis | General product specification | Version 1.0

A purified aescin saponin fraction derived from the seeds of Aesculus chinensis, supplied as a powder for professional cosmetic formulation. Total aescins A, B, C and D are specified at not less than 98.0% by HPLC, calculated on the dried basis.

1. Product identity

Product name	PINHONBIO® Aescin (Escin) 98%
INCI designation	AESCULUS CHINENSIS EXTRACT
Active constituent	Aescin / Escin, a triterpenoid saponin fraction
Botanical source	Aesculus chinensis Bunge
Plant part	Dried seeds
Extraction solvents	Ethanol and water
Aescin identifiers	CAS 6805-41-0 | EC 229-880-6
Composition	Aescin-enriched botanical fraction; total A+B+C+D ≥98.0% on dried basis. No separate carrier is specified.

2. Quality specification

Test item	Specification	Method
Total aescins A+B+C+D	≥98.0%, on dried basis	HPLC
Appearance	White powder	Visual examination
Odour	Characteristic	Organoleptic examination
Identification	Positive	TLC
Ash content	<3.0%	Gravimetry
Loss on drying	<5.0%	Gravimetry
Residual ethanol	<2,000 mg/kg	Pharmacopoeial method
Particle size	≥98% passes an 80-mesh sieve	Sieve analysis
Lead (Pb)	<2 mg/kg	Elemental analysis
Arsenic (As)	<1 mg/kg	Elemental analysis
Mercury (Hg)	<0.5 mg/kg	Elemental analysis
Cadmium (Cd)	<1 mg/kg	Elemental analysis
Total plate count	≤1,000 CFU/g	Microbiological culture
Yeasts and moulds	≤100 CFU/g	Microbiological culture
Coliforms	Not detected	Microbiological culture
Salmonella	Not detected	Microbiological culture
Staphylococcus aureus	Not detected	Microbiological culture

1 mg/kg = 1 ppm. Detailed analytical conditions and microbiological test portions are defined by controlled laboratory procedures. Dry-basis assay does not describe the mass fraction in material containing residual moisture.

3. Technical properties and applications

Aescin is a naturally derived saponin fraction rather than a single isolated isomer. This specification covers the sum of the four stated aescin components; it does not certify one individual component at ≥98%.

Solubility: Do not assume ready solubility in plain water. Public aescin references report limited aqueous solubility and solubility in methanol; the latter is an analytical reference solvent, not a recommended cosmetic formulation solvent. Screen a suitable cosmetic-compatible premix at the actual concentration, pH and temperature.

Applications: Ingredient development for topical cosmetic skin and body care. Aesculus chinensis extract is used for astringent and tonic functions. The finished formulation determines performance and suitability.

4. Formulation guidance

Prepare a suitable premix and assess dissolution, dispersion, haze and sediment before addition to the main batch. Use controlled mixing and allow for possible saponin foaming. Avoid unnecessary heat and prolonged exposure to strong light.

Select the use level through formulation development. Check compatibility with the intended pH, preservatives, electrolytes, polymers and other ingredients. Verify finished-product stability and tolerance; the raw-material assay is not a finished-product efficacy or safety claim.

5. Packaging storage and safe handling

Packaging	Double inner plastic bags in a neutral fibre / cardboard drum; net weight is defined by the order.
Storage	Store in cool and dry places and keep away from strong light and heat. Keep tightly closed and protect from moisture and contamination.
Shelf life	24 months in original unopened packaging when stored as recommended.
Workplace handling	Harmful if swallowed or inhaled; causes serious eye irritation. Avoid dust and environmental release. Use the protection described in the SDS.
Transport	See SDS Section 14: UN 3077, Class 9, Packing Group III. Any package-specific relief requires separate assessment.

6. Supplier information

Shaanxi Pinhon Biotechnology Co., Ltd. | Manufacturer & Supplier

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7. Document control and references

Issue date: 13 Oct 2026 | Version: 1.0. Standing quality limits apply across batches; individual test results are provided in the batch COA.

Merck / Sigma-Aldrich Escin E1378 identity and analytical solubility. View source

COSMILE Europe Aesculus Chinensis Extract functions. View source

EDQM Aescin SDS, hazard and transport background. View source