Vindoline Powder – Natural Isolate up to 98% from Madagascar Periwinkle (Catharanthus roseus)

Catharanthus roseus · Apocynaceae

DOCUMENT	PRODUCT CODE	DOCUMENT NO.	REVISION	PRODUCT FORM
Technical Data Sheet	AP0249	TDS-AP0249	1.0 · 24 October 2026	Botanical Isolate

1 Product description

Madagascar Periwinkle extract is produced from the leaf of Catharanthus roseus (Apocynaceae family) and supplied as a high-purity natural isolate of Vindoline. Available grades: 95%, 98%. Typical sourcing: Madagascar, India. Intended for B2B formulation in pharmaceutical.

95% 98%

2 Identification

Botanical source	*Catharanthus roseus* (Apocynaceae)
Common name(s)	Madagascar periwinkle
Plant part used	Leaf
Typical origin	Madagascar, India
Active substance	Vindoline (Indole & β-carboline alkaloids)
Molecular formula / weight	$C_{25}H_{32}N_2O_6$ · 456.5 g/mol
Manufacturing process	Solvent extraction, chromatographic purification and crystallisation
Standardisation	95–98% (HPLC)
Assay method	HPLC
Pharmacopoeia & standards	USP, Ph. Eur. (EP)

3 Specification

PARAMETER	SPECIFICATION	METHOD
Appearance	White to off-white crystalline powder	Visual
Odour	Odourless to faint characteristic	Organoleptic
Identification	Conforms to reference standard (retention time / spectrum)	HPLC / IR
Assay – Vindoline	Not less than the labelled grade (95%, 98%)	HPLC
Loss on drying	≤ 1.0%	USP ‹731›
Residue on ignition	≤ 0.5%	USP ‹281›
Particle size	Report	USP ‹786›
Bulk density	Report (typically 0.40–0.70 g/mL)	USP ‹616›
Residual solvents	Complies with ICH Q3C / USP ‹467›	GC-HS
Lead (Pb)	≤ 3.0 mg/kg	ICP-MS
Arsenic (As)	≤ 2.0 mg/kg	ICP-MS
Cadmium (Cd)	≤ 1.0 mg/kg	ICP-MS
Mercury (Hg)	≤ 0.1 mg/kg	ICP-MS
Pesticide residues	Complies with USP ‹561› and Regulation (EC) No 396/2005	GC-MS/MS, LC-MS/MS
Aflatoxins	B1 ≤ 2 µg/kg; sum of B1, B2, G1, G2 ≤ 4 µg/kg	HPLC-FLD

Total aerobic microbial count	≤ 1,000 cfu/g	USP ‹2021›
Yeasts & moulds	≤ 100 cfu/g	USP ‹2021›
Escherichia coli	Absent in 10 g	USP ‹2022›
Salmonella spp.	Absent in 25 g	USP ‹2022›
Staphylococcus aureus	Absent in 10 g	USP ‹2022›

Limits above are the standard release specification for this product class. Each lot is released against its Certificate of Analysis, which is the governing document and is available on request.

4 Grades & pack sizes

GRADE	SKU PREFIX	PACK SIZES
95%	AP0249-95	Sample (50 g) · 250 g · 1 Kg · 5 Kg · 25 Kg
98%	AP0249-98	Sample (1 g) · 50 g · 250 g · 1 Kg

5 Packaging

- Samples: food-grade HDPE jar or aluminium-laminate pouch.
- 250 g – 1 Kg: food-grade LDPE bag sealed in an aluminium-laminate pouch.
- 5 Kg – 25 Kg: double food-grade LDPE bags in a fibre drum or HDPE pail.
- Packaging may vary by lot and is stated on the packing list.

6 Storage & shelf life

- Shelf life: 24 months from date of manufacture in the original, unopened packaging.
- Store in a cool (below 25 °C), dry place, protected from light.
- Hygroscopic: reseal immediately after use and minimise exposure to humid air.

7 Applications

Industries	Pharmaceutical

Use levels depend on the finished product and the target market. The customer is responsible for establishing safe and permitted use levels and for any claims made on finished products.

8 Regulatory & compliance

- Pharmacopoeia / standard references: USP, Ph. Eur. (EP).
- **Pharmaceutical active:** Contains a pharmacologically active substance that is regulated as a medicine (often prescription-only) in many markets. Supplied only to qualified businesses after a compliance review.
- **Safety-limited:** Botanical with recognised safety limitations (toxic constituents or maximum-dose limits in many jurisdictions). Confirm permitted uses and levels for the target market.
- Allergen information: not derived from a source listed in Annex II of Regulation (EU) No 1169/2011.
- Regulatory status for food, supplement, cosmetic or pharmaceutical use (e.g. EU novel food, US NDI/GRAS, FSSAI) must be confirmed by the customer for the intended market and use.

This Technical Data Sheet is issued by CHOLAD PRIVATE LIMITED (trading as Extrakte), C 22/4, 2nd & 3rd Floor, Sector-57, Noida-201301, Uttar Pradesh, India · +91 817 8117 600 · choladco@gmail.com · extrakte.com. The information is given in good faith and reflects our current knowledge of the product; it does not constitute a warranty of properties for any specific application. Refer to the Safety Data Sheet **SDS-AP0249** for hazard, handling and transport information. Certificates of Analysis are issued per lot and are available on request.