

Milk Thistle Extract Specification Sheet

Public technical specification for buyer documentation review

Source page: <https://www.naturalbestbio.com/milk-thistle-extract.html>

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Field	Specification / note
Ingredient name	Milk Thistle Extract (Silybum marianum seed extract)
Synonyms	Silybum marianum extract; milk thistle seed extract; St. Mary's thistle extract; Carduus marianus extract; silymarin extract
CAS number	84604-20-6 (Silybum marianum extract). Standardization marker complex: silymarin, CAS 65666-07-1.
Molecular formula / weight	Not applicable — multi-constituent botanical extract. Silymarin is itself a flavonolignan complex (silybin A and B, isosilybin, silychristin, silydianin) rather than a single compound, so no single molecular formula or molecular weight describes the material. Identity is established by botanical source, plant part and marker profile.
Botanical identity	Silybum marianum (L.) Gaertn., family Asteraceae. Plant part: fruit and seed (achene). Identity confirmed by macroscopic, microscopic and chromatographic (HPLC or TLC) comparison against a reference; identity documentation supplied per lot.
Standardization / assay	Standardized to an agreed silymarin content, reported both by UV and by HPLC on the Certificate of Analysis for each lot. The exact grade is specified per order; grade options available on request. The two figures are not interchangeable: UV-spectrophotometric silymarin and HPLC sum-of-flavonolignans measure the material differently, so the same lot reads differently by each method. Because both are reported per lot, the buyer can align the incoming release specification to whichever method their own monograph or customer specification is written against, without re-testing.
Extraction ratio and solvent	Extraction ratio (e.g. drug-to-extract ratio) and extraction solvent are specified per order and stated on the specification sheet. Residual solvent results are reported per lot against the applicable pharmacopoeial limits.
Carrier / excipient declaration	Any carrier used for standardization or flowability (for example maltodextrin or silicon dioxide) is declared on the specification sheet with its inclusion level, so that the buyer's label and allergen statement can be built correctly.
Appearance	Light yellow to yellowish-brown fine powder, characteristic odour and bitter taste
Solubility	Flavonolignans are practically insoluble in water and soluble in ethanol, methanol and acetone. Water-dispersible and solubility-enhanced formats are handled as separate specifications; dissolution behaviour should be confirmed for the intended dosage form.
Stability / storage	Store in tightly closed containers in a cool, dry place, protected from light and moisture. Flavonolignans are sensitive to prolonged heat, high humidity and light; stability data available on request.
Typical applications	Capsules, tablets, softgels, powder blends and sachets for B2B nutraceutical manufacturing; commonly formulated alongside NAC, TUDCA, dihydromyricetin and artichoke extract
Documentation	Certificate of Analysis, specification sheet, botanical identity documentation, heavy metals, microbiological testing, residual solvents, pesticide residues, aflatoxins, allergen statement, GMO statement, irradiation statement, organic certification where applicable, particle size data and stability data
Quality system	ISO 22000:2018, FSSC 22000, HACCP and GMP (certificates provided on request)
Supplier	Nutrition BioTech, 1601 W. Mission Blvd, Suite 103 (DL#29), Pomona, CA 91766, United States

Public disclosure note: This public sheet is prepared from the current NaturalBestBio product-page specification block. It is not a batch-specific Certificate of Analysis. Lot-specific COA and supporting records are available for qualified buyer review when appropriate.

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