# Icariin

*Epimedium grandiflorum · Leaf*

INDICATIVE SPECIFICATION — CONFIRMED IN WRITING AT QUOTATION

| BOTANICAL SOURCE | SOURCE / PART | PRIMARY MARKER | METHOD |
|---|---|---|---|
| Epimedium grandiflorum | Leaf | Icariin | HPLC |
| **MINIMUM ORDER** | **LEAD TIME** | **STANDARD PACK** | **DOCUMENT SET** |
| 1 kg | 1–7 days | 1 kg foil pouch | COA, TDS, SDS, statements |

## SPECIFICATION

| PARAMETER | SPECIFICATION | METHOD / NOTE |
|---|---|---|
| Icariin | 98% (HPLC) | HPLC |
| Source / part | Leaf | Declaration |
| Extraction | Water–ethanol extraction and purification | Process |
| Particle size | 80 mesh, other sizes on request | Sieve |
| Marker compounds | Icariin, epimedium flavonoids | Identity / profile |
| Appearance | Yellow to yellow-brown powder | Visual |
| Solubility | Partially water-soluble; suitable for capsules and blends | Matrix dependent |
| Standard packaging | 1 kg foil pouch · 25 kg fiber drum · 5 kg carton | Food-grade liner |

## APPLICATIONS

- Pre-workout powders
- Recovery blends
- Sports capsules
- Functional beverages

## AVAILABLE FORMS

- Spray-dried powder
- Granulated powder

## WHAT TO CONFIRM BEFORE ORDERING

- Icariin is a phytoestrogen-related flavonoid; screen claims and target populations.
- Confirm the plant part and the absence of added synthetic icariin.

**Indicative document.** This sheet describes the grade we can quote; it is not a batch COA and does not confirm a specific result for a specific lot. Final specification, contaminant limits, and documentation are agreed in writing before the order. Source, part, carrier, and marker method are release parameters, not marketing descriptions.

## DOCUMENTATION RELEASED WITH EACH LOT

| DOCUMENT | CONTENT | SCOPE |
|---|---|---|
| Certificate of analysis | Identity, assay, physical parameters, contaminants, methods, limits, and release decision. | Batch-specific |
| Technical data sheet | Botanical source, plant part, carrier, solubility, storage, packaging, and applications. | Product-level |
| Safety data sheet | Sixteen sections covering hazards, handling, storage, transport, and emergency response. | Grade-specific |
| Allergen and GMO statements | Major allergens, gluten, animal-derived inputs, and GMO status. | Batch-specific |
| Origin and traceability record | Herb lot reference and the link to the manufacturing lot. | Batch-specific |
| Halal, Kosher, organic | Certificates where the grade and facility are covered; organic also requires a transaction certificate. | Per certificate scope |

## TESTING APPROACH

- **Identity:** macroscopic and TLC fingerprint against a reference.
- **Assay:** HPLC or UV-VIS with the method and basis stated on the COA.
- **Physical:** appearance, moisture, ash, mesh, bulk density, and flow.
- **Contaminants:** heavy metals by ICP-MS, residual solvents by GC, pesticide panel by LC-MS/MS and GC-MS/MS.
- **Microbiology:** TPC, yeast and mould, E. coli, and Salmonella, with additional organisms as agreed.
- **Verification:** third-party testing available for new suppliers and high-value grades.

## HOW TO REQUEST THIS GRADE

**01 · BRIEF**

Send the target specification, quantity, application, and destination market.

**02 · COUNTER-SPEC**

We confirm what can be matched and list the documents available for the grade.

**03 · SAMPLE & QUOTE**

A sample with its own COA, followed by price break points and lead time in writing.

**Contact.** Email info@rainwoodbio.com with the product name and the destination market. We reply within one business day. The specification index and further technical notes are available at ingredients.rainwoodbio.com.