Vitamin C

$C_6H_8O_6$ · CAS 50-81-7 · L-ascorbic acid, crystalline

INDICATIVE SPECIFICATION — CONFIRMED IN WRITING AT QUOTATION

CHEMICAL FORM	FORMULA	CAS	PRIMARY ASSAY
L-ascorbic acid, crystalline	$C_6H_8O_6$	50-81-7	99.0–100.5% (iodometric titration)
METHOD	**MINIMUM ORDER**	**LEAD TIME**	**STANDARD PACK**
Iodometric titration and HPLC	1 kg	1–7 days	1 kg foil pouch

SPECIFICATION

PARAMETER	SPECIFICATION	METHOD / NOTE
Assay (as $C_6H_8O_6$)	99.0–100.5% (iodometric titration)	Specification
Appearance	White to off-white crystals or crystalline powder	Specification
Identification	IR and UV conform	Specification
Specific rotation	+20.5° to +21.5° (10% solution)	Specification
pH (5% solution)	2.1–2.6	Specification
Loss on drying	≤0.5%	Specification
Residue on ignition	≤0.1%	Specification
Oxalic acid	≤0.2%	Specification
Iron / copper	Fe ≤2 ppm · Cu ≤5 ppm	Specification
Heavy metals	Pb ≤3 · As ≤2 · Cd ≤1 · Hg ≤0.1 mg/kg	Specification
Microbiology	APC ≤1,000 cfu/g · yeast and mould ≤100 cfu/g · E. coli and Salmonella absent	Specification
Marker set	L-ascorbic acid (99.0–100.5%), E300	Identity / ratio
Appearance	White to off-white crystals or crystalline powder	Visual
Solubility	Freely soluble in water; the 5% solution is acidic (pH 2.1–2.6).	Matrix dependent
Standard packaging	1 kg foil pouch · 25 kg fiber drum	Food-grade liner

APPLICATIONS

- Capsules and tablets
- Powder sticks and drink mixes
- Functional beverages
- Gummies and chews

AVAILABLE FORMS

- Crystalline powder, 40 mesh
- Fine powder, 80 mesh
- Coated grade on request
- Sodium ascorbate on request

WHAT TO CONFIRM BEFORE ORDERING

- Confirm the form: ascorbic acid, sodium ascorbate and coated ascorbic acid are different label ingredients with different pH behaviour.
- Ask for the assay method and the oxalic acid figure; iodometric titration is standard, but the impurity panel separates grades.
- Light, heat, moisture and trace metals drive oxidation; the pack and the blend matter as much as the assay.
- E300 is a food-additive identity; a supplement label may use the vitamin name instead. Confirm the market's labelling rule.

Indicative document. This sheet describes the grade we can quote; it is not a batch COA and does not confirm a result for a specific lot. Final specification, contaminant limits and documentation are agreed in writing before the order. The form, hydrate state, ligand ratio and method are release parameters, not marketing descriptions.

DOCUMENTATION RELEASED WITH EACH LOT

DOCUMENT	CONTENT	SCOPE
Certificate of analysis	Assay, identity, physical parameters, contaminant panel and the release decision for the lot.	Batch-specific
Technical data sheet	Form, hydrate state, CAS, specification ranges, solubility, bulk density, storage and packing.	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	Manufacturing site and the link between the lot and the retained sample.	Batch-specific
Residual-solvent statement	The crystallisation system and the solvent class, where applicable.	Batch-specific

HOW TO REQUEST THIS GRADE

01 · BRIEF

Send the target specification, quantity, dosage form and destination market.

02 · COUNTER-SPEC

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

03 · SAMPLE & QUOTE

A sample with its own COA, followed by packing, lead time and terms in writing.

No claim is made here. This sheet does not claim a therapeutic effect, a product certification or a regulatory approval. Health claims belong to the brand that makes them and to the market that authorises them.

Shaanxi Rainwood Biotech Co., Ltd. · Rm 218, Tangxing Digital Bldg, #6 Tangxing Rd, Xi'an, Shaanxi, China

info@rainwoodbio.com · nutrition.rainwoodbio.com