Magnesium Bisglycinate

$Mg(C_2H_4NO_2)_2$ · CAS 14783-68-7 · 1:2 magnesium–glycine chelate, anhydrous basis

INDICATIVE SPECIFICATION — CONFIRMED IN WRITING AT QUOTATION

CHEMICAL FORM	FORMULA	CAS	PRIMARY ASSAY
1:2 magnesium–glycine chelate, anhydrous basis	$Mg(C_2H_4NO_2)_2$	14783-68-7	13.5–14.2% (complexometric EDTA)
METHOD	**MINIMUM ORDER**	**LEAD TIME**	**STANDARD PACK**
Complexometric EDTA titration and HPLC	1 kg	1–7 days	1 kg foil pouch

SPECIFICATION

PARAMETER	SPECIFICATION	METHOD / NOTE
Magnesium (Mg)	13.5–14.2% (complexometric EDTA)	Analytical
Glycine	84.0–88.0% (HPLC)	Analytical
Mg : glycine ratio	1 : 2 molar (calculated)	Specification
Free glycine	≤1.0% (HPLC)	Analytical
Appearance	White to off-white crystalline powder	Specification
pH (5% suspension)	8.5–11.5	Specification
Loss on drying	≤8.0%	Specification
Particle size	≥95% through 40 mesh	Sieve
Bulk density	0.55–0.90 g/mL	Tapped cylinder
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	Magnesium (13.5–14.2%), glycine (84.0–88.0%), Mg : glycine 1:2	Identity / ratio
Appearance	White to off-white, free-flowing crystalline powder	Visual
Solubility	Soluble in water; the 5% suspension is alkaline (pH 8.5–11.5). Dissolution rate depends on particle size.	Matrix dependent
Standard packaging	1 kg foil pouch · 25 kg fiber drum	Food-grade liner

APPLICATIONS

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

AVAILABLE FORMS

- Crystalline powder, 40 mesh
- Milled to 80 mesh on request
- Granulated on request

- Functional beverages

WHAT TO CONFIRM BEFORE ORDERING

- Name the hydrate. A 14% grade, a monohydrate and a dihydrate all get sold as magnesium glycinate, and the elemental magnesium differs.
- Ask whether the material is fully reacted. A blend with magnesium oxide can still pass a magnesium assay.
- Read the Mg : glycine ratio and free glycine together; either figure alone can be met by adding glycine.
- Particle size and bulk density decide capsule fill weight and tablet flow. Ask for both, not for a mesh range alone.

> **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