Ferrous Gluconate

$C_{12}H_{22}FeO_{14}\cdot 2H_2O$ · CAS 299-29-6 · Ferrous gluconate dihydrate, powder

INDICATIVE SPECIFICATION — CONFIRMED IN WRITING AT QUOTATION

CHEMICAL FORM	FORMULA	CAS	PRIMARY ASSAY
Ferrous gluconate dihydrate, powder	$C_{12}H_{22}FeO_{14}\cdot 2H_2O$	299-29-6	11.8–12.5% (cerimetric titration)
METHOD	**MINIMUM ORDER**	**LEAD TIME**	**STANDARD PACK**
Cerimetric titration	1 kg	1–7 days	1 kg foil pouch

SPECIFICATION

PARAMETER	SPECIFICATION	METHOD / NOTE
Iron (Fe), dried basis	11.8–12.5% (cerimetric titration)	Specification
Appearance	Greyish-yellow to greenish-yellow powder	Specification
Identification	Ferrous reaction and IR conform	Specification
Loss on drying	≤8.0%	Specification
pH (5% solution)	3.0–5.0	Specification
Particle size	≥95% through 80 mesh	Sieve
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	Iron (11.8–12.5%, dried basis)	Identity / ratio
Appearance	Greyish-yellow to greenish-yellow powder	Visual
Solubility	Soluble in water with gentle warming; the solution is acidic.	Matrix dependent
Standard packaging	1 kg foil pouch · 25 kg fiber drum	Food-grade liner

APPLICATIONS

- Capsules and tablets
- Powder sticks and drink mixes

AVAILABLE FORMS

- Dihydrate powder, 80 mesh
- Granulated on request
- Milled to 100 mesh on request

WHAT TO CONFIRM BEFORE ORDERING

- Name the oxidation state and the hydrate: ferrous gluconate is not ferric gluconate, and the dihydrate carries water.
- Ask for the iron assay and the ferrous/ferric ratio; oxidation changes the colour and the label.
- Iron salts are hygroscopic and can catalyse oxidation in a blend; the pack and the matrix belong in the specification.

- Confirm the elemental iron figure, not only the gluconate assay, when the label declares iron.

> **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.

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