Lactitol Monohydrate

$C_{12}H_{24}O_{11}\cdot H_2O$ · CAS 81025-04-9 · Lactitol monohydrate, crystalline powder

INDICATIVE SPECIFICATION — CONFIRMED IN WRITING AT QUOTATION

IDENTITY / FORM	FORMULA	CAS	PRIMARY ASSAY
Lactitol monohydrate, crystalline powder	$C_{12}H_{24}O_{11}\cdot H_2O$	81025-04-9	≥98.0% (HPLC-RI)
METHOD	**MINIMUM ORDER**	**LEAD TIME**	**STANDARD PACK**
HPLC-RI	1 kg	3–10 days	1 kg foil pouch

SPECIFICATION

PARAMETER	SPECIFICATION	METHOD / NOTE
Lactitol (dry basis)	≥98.0% (HPLC-RI)	Analytical
Appearance	White crystalline powder	Specification
Moisture	≤0.5% (monohydrate basis)	Specification
pH (10% solution)	4.5–7.0	Specification
Solubility	Soluble in water; low hygroscopicity	Specification
Particle size	≥95% through 60 mesh	Sieve
Bulk density	0.55–0.85 g/mL	Tapped cylinder
Other polyols	≤1.0% (HPLC-RI)	Analytical
Heavy metals	Pb ≤0.5 · As ≤0.5 · Cd ≤0.5 · 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 / profile	Lactitol ≥98%, monohydrate	Identity / ratio
Appearance	White crystalline powder	Visual
Solubility	Soluble in water; low hygroscopicity and a clean, mild sweetness.	Matrix dependent
Standard packaging	1 kg foil pouch · 25 kg fiber drum	Food-grade liner

APPLICATIONS

- Sugar-free chocolate
- Bakery
- Confectionery
- Ice cream
- Tabletop

AVAILABLE FORMS

- Crystalline powder, 60 mesh
- Granular
- Fine powder

WHAT TO CONFIRM BEFORE ORDERING

- Ask for the monohydrate or anhydrous form and the moisture basis.
- Lactitol is less sweet than sucrose; calculate the sweetness and the bulk separately.
- Test the chocolate tempering and the bakery crumb, not only the powder.

> **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 identity, assay basis, profile 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	Identity, form, 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, application 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.

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