# Tagatose

*$C_6H_{12}O_6$ · CAS 87-81-0 · D-Tagatose, crystalline powder*

**CATALOG TDS — CONFIRMED IN WRITING AT QUOTATION**

| IDENTITY / FORM | FORMULA | CAS | PRIMARY ASSAY |
|---|---|---|---|
| D-Tagatose, crystalline powder | $C_6H_{12}O_6$ | 87-81-0 | 98.0–102.0% (HPLC-RI) |
| **METHOD** | **MINIMUM ORDER** | **LEAD TIME** | **STANDARD PACK** |
| HPLC-RI or HPLC with refractive index detection | 1 kg | 3–10 days | 1 kg foil pouch · 25 kg fiber drum |

## DESCRIPTION

A crystalline tagatose for reduced-sugar confectionery and beverages, with a sucrose-like sweetness and browning behaviour described before the trial.

## SWEETNESS

90% of sucrose, indicative

## TASTE NOTE

Sucrose-like sweetness with a slight cooling effect and a clean finish; at high dose a subtle fruit note can appear.

## SPECIFICATION

| PARAMETER | SPECIFICATION | METHOD / NOTE |
|---|---|---|
| Assay (dried basis) | 98.0–102.0% (HPLC-RI) | As stated |
| Appearance | White crystalline powder | As stated |
| Moisture | ≤1.0% | As stated |
| pH (10% solution) | 4.0–7.0 | As stated |
| Solubility | Freely soluble in water | As stated |
| Particle size | ≥95% through 60 mesh | As stated |
| Bulk density | 0.50–0.80 g/mL | As stated |
| Other sugars | ≤1.0% (HPLC) | As stated |
| Heavy metals | Pb ≤0.5 · As ≤0.5 · Cd ≤0.5 · Hg ≤0.1 mg/kg | As stated |
| Microbiology | APC ≤1,000 cfu/g · yeast and mould ≤100 cfu/g · E. coli and Salmonella absent | As stated |
| Marker / profile | Tagatose 98.0–102.0%, other sugars ≤1.0% | Identity |
| Solubility | Freely soluble in water; clean solutions at use levels. | Matrix dependent |
| Starting use level | 2–10% in beverages and confectionery, depending on the sugar replacement | Application dependent |

| PARAMETER | SPECIFICATION | METHOD / NOTE |
|---|---|---|
| pH behaviour | Stable across normal food pH; browning should be checked at high heat. | Matrix dependent |

## APPLICATIONS

- Beverages
- Confectionery
- Bakery
- Tabletop
- Dairy

## AVAILABLE FORMS

- Crystalline powder, 60 mesh
- Fine powder
- Granular

## PACKING

- 1 kg foil pouch
- 25 kg fiber drum

## STORAGE

Store in a cool, dry, well-ventilated area, away from direct sunlight and moisture. Keep the pack closed after sampling. The lot-specific retest date is shown on the batch COA.

## DOCUMENTATION RELEASED WITH EACH LOT

- Batch-specific certificate of analysis
- Technical data sheet and safety data sheet
- Allergen, GMO, origin and residual-solvent statements
- Third-party reports on request

**Catalog document.** This TDS describes the grade we can quote. The final specification, pack and documentation are confirmed in writing before the order. It is not a batch COA and does not report a result for a specific lot.

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