Thaumatin

Thaumatin protein (thaumatin I and II) · CAS 53850-34-3 · Purified sweet protein from Thaumatococcus daniellii

CATALOG TDS — CONFIRMED IN WRITING AT QUOTATION

IDENTITY / FORM	FORMULA	CAS	PRIMARY ASSAY
Purified sweet protein from Thaumatococcus daniellii	Thaumatin protein (thaumatin I and II)	53850-34-3	≥95.0% (dry basis)
METHOD	**MINIMUM ORDER**	**LEAD TIME**	**STANDARD PACK**
HPLC protein profile and SDS-PAGE identity	1 kg	3–10 days	1 kg foil pouch · 25 kg fiber drum

DESCRIPTION

A purified thaumatin protein for trace-level sweetness and mouthfeel, with the protein content, solubility and allergen assessment stated before use.

SWEETNESS

2,000–3,000 × sucrose, indicative

TASTE NOTE

Slow onset, intense sweetness with a liquorice-like tail; at low dose it adds body and rounds other sweeteners.

SPECIFICATION

PARAMETER	SPECIFICATION	METHOD / NOTE
Protein (thaumatin)	≥95.0% (dry basis)	As stated
Appearance	White to cream-coloured powder	As stated
Moisture	≤10.0%	As stated
pH (1% solution)	5.0–7.5	As stated
Solubility	Freely soluble in water	As stated
Particle size	≥95% through 100 mesh	As stated
Bulk density	0.25–0.55 g/mL	As stated
Ash	≤3.0%	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	Protein ≥95%, thaumatin I/II by HPLC	Identity
Solubility	Freely soluble in water; solutions are protein systems and need a preservation and pH strategy.	Matrix dependent

PARAMETER	SPECIFICATION	METHOD / NOTE
Starting use level	0.0005–0.005% in food, depending on the category and the blend	Application dependent
pH behaviour	Most stable at mildly acidic to neutral pH; extremes and prolonged heat reduce activity.	Matrix dependent

APPLICATIONS

- Beverages
- Dairy
- Confectionery
- Oral care
- Supplements

AVAILABLE FORMS

- Powder, 100 mesh
- Liquid on request

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.

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