

L-Theanine

Date: April 1, 2014

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Suntheanine[®] A001 is produced in the United States via a patented enzymatic process, resulting in an enantiomerically pure L-theanine. Suntheanine[®] A001 is GRAS Affirmed with FDA Letter of no Objection (GRN 000209).

Suntheanine® A001 is Food Grade, non GMO and is certified @ Kosher.

Composition: 100% L-Theanine, no excipients or carriers. Country of Origin: U.S.A.

Specifications

Item	Specification Value	Method / Condition
Description	White crystalline powder	Sensory evaluation
Purity	Not less than 98.0% L-theanine	HPLC (dry basis)
Particle Size	Not less than 95.0% through	USA 35 mesh sieve
Bulk Density	$0.25 \sim 0.50 \text{ g/cm}^3$	LBD
Loss on Drying	Not more than 1.00%	1g, 105°C, 3 hr
Residue on Ignition	Not more than 0.20%	Ashing method with sulfuric acid
pH	5.0 - 6.0	pH meter (1% solution)
Chloride (as Cl)	Not more than 0.021%	Chloride limit test
Specific Rotation	+7.7° - +8.5°	Specific Rotation $[\alpha]_{D}^{20}$
Heavy Metals (as Pb)	Not more than $1 \mu g/g$	Sodium sulfide colorimetric method
Arsenic (as As ₂ O ₃)	Not more than $4.0 \mu\text{g/g}$	ICP-MS
Cadmium (as Cd)	Not more than $1 \mu g/g$	ICP-MS
Lead	Not more than $1 \mu g/g$	ICP-MS
Mercury	Not more than $0.1 \mu\text{g/g}$	ICP-MS
Standard Plate Count	Not more than 1,000 cfu/g	SCD agar plate
Coliform	Negative / 0.1 g	LB method
E. coli	Negative / 0.1 g	MacConkey agar method
Salmonella	Negative / 375 g	PCR method
S. aureus	Negative / 0.02 g	Mannitol salt agar plate
Mold	Not more than 100 cfu/g	Potato dextrose agar plate (chloramphenicol)
Yeast	Not more than 100 cfu/g	Potato dextrose agar plate (chloramphenicol)

Packaging and Storage

10 kg net weight in a double polyethylene bag per carton box. Contains Silica Gel Desiccant. In its original unopened packaging, may be stored at room temperature at least 36 months from date of production. Store in a cool, dry place away from heat and direct light.

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