Safety Data Sheet (SDS) - L-Theanine Green Tea Extract

According to Regulation (EC) No 1907/2006 (REACH), as amended by Regulation (EU) 2020/878
Version 1.2, 23-Nov-2026

Section 1. Identification of the substance/mixture and of the company

Product name: L-Theanine Green Tea Extract
Recommended uses: Ingredient for professional nutraceutical, food-supplement, formulation, analytical and R&D use
Uses advised against: Uses not permitted by applicable legislation; household or non-professional use
Catalogue Number: N/A
Supplier: NATURE SCIENCE TECHNOLOGIES Ltd
Briezu 11, Lapsas, Latvia, LV-2107
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Section 2. Hazards identification

Classification: Regulation (EC) No 1272/2008 (CLP): Skin Irrit. 2, H315; Skin Sens. 1, H317; Eye Irrit. 2, H319; STOT SE 3 (respiratory irritation), H335.

Label elements: Hazard pictogram: GHS07 (exclamation mark). Signal word: Warning.



Hazard statements: H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H335 May cause respiratory irritation.
Precautionary statements: P261 Avoid breathing dust. P264 Wash thoroughly after handling. P272 Contaminated work clothing should not be allowed out of the workplace. P280 Wear protective gloves/eye protection. P302+P352 IF ON SKIN: Wash with plenty of water. P333+P313 If skin irritation or rash occurs: Get medical advice/attention. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes; remove contact lenses if present and easy to do; continue rinsing. P337+P313 If eye irritation persists: Get medical advice/attention. P362+P364 Take off contaminated clothing and wash it before reuse. P403+P233 Store in a well-ventilated place. Keep container tightly closed. P501 Dispose of contents/container in accordance with applicable regulations.
Other hazards: The product is not identified as PBT, vPvB or an endocrine disruptor.

Section 3. Composition/information on ingredients

Chemical name: L-Theanine, >=98.0% (HPLC assay specification); caffeine, <=0.5% (HPLC specification); other green-tea extract constituents, balance
Synonyms: N-gamma-Ethyl-L-glutamine; gamma-Glutamylethylamide; L-Glutamic acid gamma-(ethylamide); Suntheanine
Chemical formula: $C_7H_{14}N_2O_3$ (L-Theanine)
Molecular weight: 174.20 g/mol (L-Theanine)
CAS No: 3081-61-6 (L-Theanine)
EC No. 221-379-0 (L-Theanine)

Section 4. First aid measures

Inhalation: Move to fresh air and keep at rest in a position comfortable for breathing. Call a doctor if breathing difficulty, irritation or other symptoms occur or persist.
Skin: Remove contaminated clothing. Wash skin with soap and plenty of water. If skin irritation or rash occurs, obtain medical advice. Wash contaminated clothing before reuse.
Eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Obtain medical attention if irritation persists.
Ingestion: Rinse mouth. Do not induce vomiting. Obtain medical advice if unwell or if a significant amount has been swallowed.

Section 5. Firefighting measures

Extinguishing media suitable: Water spray, alcohol-resistant foam, dry extinguishing powder or carbon dioxide. Use extinguishing measures appropriate to the surrounding fire.
Special protection of fire-fighters: Wear self-contained breathing apparatus and full protective equipment. Thermal decomposition may produce carbon monoxide, carbon dioxide and nitrogen oxides.

Section 6. Accidental release measures

Personal precautions: Avoid dust formation, inhalation and contact with skin or eyes. Ensure adequate ventilation and wear the protective equipment described in Section 8.
Environmental precautions: Prevent entry into drains, surface water and soil. Avoid uncontrolled release to the environment.

Methods for cleaning up:	Collect mechanically or with a HEPA-filtered vacuum without generating dust. Place in a closed, labelled container for disposal and clean the affected area.

Section 7. Handling and storage

Handling:	Handle in a well-ventilated area. Minimise dust formation. Avoid inhalation, ingestion and contact with skin, eyes and clothing. Wash thoroughly after handling.
Storage:	Store in a cool and dry place; keep away from strong light and heat. Keep container tightly closed and protect from moisture. Keep away from strong oxidising agents.

Section 8. Exposure controls/personal protection

Engineering measures:	No substance-specific occupational exposure limit has been established. Apply applicable limits for nuisance dust. Use local exhaust ventilation where dust may form and provide eyewash facilities.
Hygiene measures:	Wash hands and exposed skin thoroughly after handling and before breaks. Do not eat, drink or smoke in work areas. Do not allow contaminated work clothing out of the workplace.
Personal protective equipment:	Respiratory protection: suitable particulate-filter respirator when dust forms or ventilation is insufficient. Hands: chemical-resistant protective gloves, e.g. nitrile.
Skin and body:	Protective work clothing appropriate to the scale and duration of exposure. Wash contaminated clothing before reuse.
Eyes:	Safety glasses with side shields; use chemical goggles where dust exposure is significant.

Section 9. Physical and chemical properties

Physical state:	Solid, crystalline powder
Colour:	White to off-white
Odour:	Characteristic
Molecular Weight:	174.20 g/mol (L-Theanine)
Melting point:	207 deg C (reference value for L-Theanine)
Flash point:	No data available
Boiling point:	No data available; decomposition may occur before boiling
Solubility:	Soluble in water
Explosive properties:	Not classified as explosive. Accumulated fine airborne dust may form a combustible dust atmosphere.

Section 10. Stability and reactivity

Stability:	Stable under recommended storage and normal handling conditions. Protect from moisture, strong light and heat.
Materials to avoid:	Strong oxidising agents, excessive heat, strong light and moisture.
Hazardous decomposition products:	Carbon monoxide, carbon dioxide and nitrogen oxides may form during combustion or thermal decomposition.

Section 11. Toxicological information

Acute toxicity:	Based on available data, the classification criteria for acute toxicity are not met. Reliable quantitative LD50/ATE data for the supplied product are not available.
Skin corrosion/irritation:	Causes skin irritation and serious eye irritation. Dust may intensify mechanical irritation.
Respiratory or skin sensitisation:	May cause an allergic skin reaction. Based on available data, the product is not classified as a respiratory sensitiser.
CMR effects:	Based on available data, the product is not classified for germ-cell mutagenicity, carcinogenicity or reproductive toxicity.
Signs and symptoms of exposure:	Skin contact may cause redness, itching or an allergic rash. Eye contact may cause pain, redness and tearing. Dust may irritate the respiratory tract.
Potential health effects:	See the route-specific information below. Sensitisation may develop after repeated or prolonged skin exposure.
Inhalation:	May cause respiratory irritation. Dust may cause coughing, sore throat or breathing discomfort.
Skin:	Causes skin irritation and may cause an allergic skin reaction, including redness, itching or rash.
Eyes:	Causes serious eye irritation; redness, pain and tearing may occur.
Ingestion:	May cause gastrointestinal discomfort if swallowed. Acute toxicity classification criteria are not met based on available data.
Other information:	Handle using standard precautions for sensitising chemical substances and prevent unnecessary dust and skin exposure.

Section 12. Ecological information

Ecotoxicity:	No adequate aquatic toxicity data are available. The product is not classified as hazardous to the aquatic environment. Avoid uncontrolled release.
Persistence and degradability:	Persistence, degradability, bioaccumulation and mobility data are limited. Based on available information, the product is not identified as PBT or vPvB.

Other adverse effects:	The product is not identified as having endocrine-disrupting properties at 0.1% or above. No other adverse environmental effects are known.

Section 13. Disposal considerations

Product:	Dispose of contents through a licensed waste disposal contractor in accordance with local, regional and national requirements. Do not discharge to drains.
Contaminated packaging:	Empty completely. Handle contaminated packaging in the same way as the product. Recycle clean packaging where permitted.

Section 14. Transport information

ADR/RID:	Not regulated as dangerous goods
IMDG:	Not regulated as dangerous goods
IATA:	Not regulated as dangerous goods

Section 15. Regulatory information

EU regulatory information:	Prepared in accordance with Regulation (EC) No 1907/2006 (REACH), Annex II, as amended by Regulation (EU) 2020/878. Classification and labelling have been assessed under Regulation (EC) No 1272/2008 (CLP), as amended. Food and food-supplement use must comply with all applicable EU and national requirements. A chemical safety assessment has not been carried out by the supplier for this product.

Section 16. Other information

Notice to reader:	Version 1.2; revision date 23-Nov-2026. Revised to retain only general grade specifications. Approved GHS pictogram artwork was applied with corrected aspect ratio and spacing. Chemical classification and transport wording were not changed. Hazard statements: H315 Causes skin irritation; H317 May cause an allergic skin reaction; H319 Causes serious eye irritation; H335 May cause respiratory irritation. The information is based on the product specification and safety information available at the date of issue. It is provided in good faith as guidance for safe handling, storage, transport and disposal and is not a warranty of product properties. Users are responsible for assessing suitability and complying with all applicable requirements for their intended use.