



TECHNICAL DATA SHEET (TDS)

SIGMA

Amino-acid organic biostimulant

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CEON Enterprise Ltd - Agricultural plant nutrition and specialty fertiliser documentation

1. Product identity and positioning

SIGMA is a plant-origin liquid organic fertiliser classified as a amino-acid organic biostimulant. A plant-origin liquid organic nutrition product combining carbon, amino acids, potassium and humic substances for metabolic activation and stress recovery.

The product is intended for integration into a crop-specific nutrition programme based on soil or substrate analysis, irrigation-water quality, crop stage and local agronomic conditions.

2. Guaranteed analysis

Parameter	Specification
Total Organic Matter	45% w/v
Organic Carbon (C)	16% w/v
Total Nitrogen (N)	2% w/v
Organic Nitrogen (N)	2% w/v
Total Amino Acids	2% w/v
Water-soluble Potassium Oxide (K ₂ O)	6% w/v
Humic + Fulvic Acids	12% w/v

Values are catalogue declarations. Commercial batch release must be supported by the signed batch COA and the approved market label.

3. Functional agronomy

- Organic carbon provides a substrate for beneficial rhizosphere activity.
- Humic fractions support cation retention, soil aggregation and root-zone buffering.
- Fulvic fractions assist nutrient complexing and mobility in soil and plant systems.
- The product can improve the efficiency and consistency of conventional fertiliser programmes.

4. Recommended application framework

Primary timing: vegetative growth, flowering, fruit set and recovery from stress. Final dose and frequency must be established by an agronomist and aligned with the registered label in the country of use.

Application route	Professional starting framework	Operational notes
Fertigation / soil	1-3 L/ha per application	Dilute into the irrigation stream; use repeated lower doses where appropriate.
Foliar	100-300 mL/100 L water	Apply in cool conditions; ensure crop safety and local-label approval.

These rates are technical starting points, not a substitute for the approved commercial label or local registration.

5. Mixing and water-management procedure

- Fill the mixing tank to at least one-half with clean water and start agitation.
- Add product slowly; allow full dispersion or dissolution before adding further components.
- Maintain agitation during preparation and application.
- Perform a jar test before combining with calcium-rich, strongly acidic/alkaline or pesticide products.
- Avoid mixing concentrated stock solutions unless chemical compatibility is confirmed.
- Flush fertigation equipment after use and prevent dried residues in filters and emitters.

6. Quality-control characteristics

Control item	Release expectation
Identity / appearance	Plant-origin liquid organic fertiliser
Declared nutrients	Conformity with guaranteed analysis and approved tolerance
Homogeneity	Uniform product without abnormal separation or foreign matter
Solubility / dispersibility	Suitable for intended application route
Packaging integrity	Sealed, correctly labelled and traceable by batch
Retained sample	Maintained under the manufacturer quality system

7. Storage, handling and shelf-life control

- Store in the original, tightly closed package in a cool, dry and ventilated place.
- Protect from direct sunlight, frost, excessive heat, moisture and contamination.
- Keep away from food, feed, children and unauthorised persons.
- Use first-in/first-out stock rotation and inspect packaging before dispatch.
- Shelf life and expiry shall follow the approved label and batch documentation.

8. Regulatory and technical notice

This TDS is prepared from the CEON catalogue declaration for technical communication. Product registration, market label, SDS classification, transport status and claims must be confirmed for the destination country before commercial placement. Agronomic response varies with crop, climate, soil, water and management.