

TECHNICAL DATA SHEET (TDS)

Product	PROTERRA	Document	Technical Data Sheet
Category	Microbial soil fertiliser with Bacillus, Pseudomonas and humic organic matrix	Code	CEON-TDS-83-R05
Catalogue source	CEON catalogue PDF page 86	Status	Technical publication copy - final regulatory review required

1. Product identity and technical positioning

A concentrated microbial soil fertiliser combining Bacillus amyloliquefaciens, Pseudomonas fluorescens and an organic matrix of humic/fulvic extracts, hydrolysed protein and yeast extract.

Intended technical function

Microbial soil fertiliser with Bacillus, Pseudomonas and humic organic matrix.

Physical form

Water-dispersible microbial powder. Appearance, density, pH, moisture and particle-size values are controlled by the approved batch specification and shall be reported on the batch COA.

2. Guaranteed analysis

Parameter	Specification
Microbial inoculum - minimum concentration	1×10^8 CFU/g
Bacillus amyloliquefaciens	Declared microbial component
Pseudomonas fluorescens	Declared microbial component
Humic and fulvic acid extract, hydrolysed protein and yeast extract	95% w/w

Quality-control note

Declared nutrient or active-content values are catalogue specifications. Final release requires identity, appearance and relevant analytical checks against the approved master specification. No batch result is implied by this TDS.

3. Agronomic benefits and mode of use

- Supports root-zone colonisation and development of root hairs.
- Promotes phosphorus and iron availability and nutrient uptake.
- Contributes humic substances and amino-acid-rich organic components to the rhizosphere.
- Supports balanced root and shoot development at periods of high nutrient demand.
- Helps maintain biologically active soil and may support resilience against selected soil-borne stress factors.

4. Application programme

- Recommended for vegetables, cultivated flowers, ornamentals, fruit, citrus, grapes and tropical crops.
- Drip/root application: 2 kg/ha in 100-200 L water.
- Suggested timing: at transplanting; at fruit formation/flower fall; and approximately 30 days later, with one further repeat where needed.
- Prepare the solution shortly before use and apply to moist soil or follow with irrigation.

Application principles

- Calibrate injection or spray equipment before use.
- Base the final rate on crop, growth stage, water quality, soil/leaf analysis, climatic conditions and local agronomic advice.
- Do not exceed the catalogue rate or the legal label of any tank-mix partner.
- Ensure uniform distribution and adequate water volume for the intended application.

5. Compatibility and tank-mixing

Do not mix with chlorinated water, copper derivatives, bactericides or fungicides that may reduce microbial viability. Prepare at pH 5-7 where possible. Use clean equipment and avoid prolonged exposure of the mixed solution to heat or direct sunlight.

Recommended sequence

- Fill the clean tank partly with water and start agitation.
- Add water conditioners first where applicable, followed by dry products, suspension products, soluble concentrates and emulsifiable concentrates according to partner labels.
- Add organosilicone adjuvants near the end of filling.
- Complete with water and maintain appropriate agitation.

6. Packaging, storage and handling

Packaging: 1 kg pack.

- Keep in the original, tightly closed and correctly labelled container.
- Store in a cool, dry and ventilated area away from direct sunlight, frost, excessive heat and incompatible materials.
- Keep biological products away from disinfectants and conditions that reduce viability.
- Prevent contamination of food, feed, seed and drinking water.
- Use appropriate gloves and eye protection during handling.

7. Technical limitations

- Performance depends on correct diagnosis, dose, timing, water quality and application coverage.
- Catalogue benefits are technical positioning statements and are not a guarantee of yield.
- Pesticidal or biological-control uses are subject to local registration, approved label and maximum-residue/worker-safety requirements.
- This document does not replace local legal labelling, product registration, crop-protection labels or professional agronomic advice.

8. Document control

Source reference: CEON Products Catalogue, PDF page 86. This Rev.05 document expands the catalogue information into a website/distributor technical format. Regulatory classification, local-language label, shelf life and market-specific claims must be approved before commercial issue.