Greenacle, Lemelerberg 58
2402 ZK Alphen aan den Rijn
The Netherlands

# GRN49699 Sludge Bioremediation Technical Bulletin

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For more information about this and other products please see our library for additional documentation.

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Low cost, *biological* treatment

- Simple, effective composting protocol
- Permanent odor elimination
- Permanent pathogen elimination
- Heavy-metal bio-sequestration
- No further treatment required
- **GREEN**

Stabilized sludge compost is safe for use as artificial soil component if mixed 1:1 with regular soil
See “Artificial Soil from Wastewater Sludge” Technical Bulletin.

Our product provides an effective biological solution for stabilizing industrial and sewage sludge.

- Employs novel technologies for blocking and sequestering heavy metals and contaminants:
  - Bio-active marine algae Ascophyllum Nodosum:
    - Ion-exchange capacity eliminates organic odors;
    - Builds healthy and robust microbial culture which out-competes pathogens in soil;
    - Binds and sequesters heavy metals at a molecular level;
    - Negatively charged and "offers" negative ions to cation (positively-charged); elements in the soil (Cadmium, Chromium, Copper, Lead, Nickel, Mercury, Zinc).
- Provides an extremely low-cost, innovative solution to sewerage sludge use – a technological leap in sludge treatment;
- Soil meets heavy-metal and pathogen standards;
- A low-cost alternative to solidification and thermal desorption technologies.
- Provides a permanent solution to:
  - Sludge odor and pathogen elimination;
  - No special equipment required.

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## Protocol:

Sludge must be analyzed to determine:

- Contaminant content and levels - pathogens + heavy metals;
- Organic content + moisture content.

Application: Sludge is sprayed with the additive and composted for 6 weeks.

## Dosage rate:

200ml additive 400 and 200ml additive 200/m³ of sludge, following a dilution step in water at 1:100. Benefit by mixing with Carbon-source (wood chips) to increase C:N ratio and enhance metabolic composting process.

## Usage:

After 6 weeks, stable, treated sludge compost can be mixed 1:1 with low-grade soil for use as artificial soil in land filling, mining covers, etc.

Artificial soil can be hydro seeded or landscaped and will support plant life without danger of heavy metal contamination in plants and water run-off.

Our full product line is certified ORGANIC under the European Community regulations, which governs organic production, labeling and control of animal and human feedstuffs. All of our products can be sold and used in the eco-systems of agriculture in all member states of the European Community without special permission.