

# BIO-SYSTEMS EUROPE

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## Ammonia reduction **EU1000**

**EU1000** is a liquid formulation of **Nitrosomonas**, which convert ammonia to nitrite, and **Nitrobacter** that convert the nitrite to nitrate. The product is designed to remove Ammonia quickly and conveniently in aerobic biological waste water treatment systems.

**EU1000** is designed to improve the performance of such systems in the following ways:-

- It rapidly establishes a nitrifying population in seasonally operated systems and ensures certain and rapid establishment of a nitrified effluent in newly constructed sewage treatment and industrial waste water treatment plant.
- It assists in the maintenance of a nitrified effluent in short sludge age systems.
- It brings about rapid recovery of nitrification in systems that have temporarily lost the ability to nitrify.
- It assists nitrification in percolating filters, which are organically overloaded by reinforcing nitrifiers that are already colonising the lower levels of the filter media.

Nitrifying bacteria are not able to form spores and are sensitive to temperature, pH and Oxygen levels. Unlike heterotrophic bacteria they take a long time to multiply, typically 15-18 hours.

### Optimum conditions for Ammonia removal are:

Temperature 18 deg C but tolerant to 6 deg C.  
pH 7.6 to 8.4  
Dissolved Oxygen levels above 2.0 mg/L.

### EU1000 SPECIFICATION

|                   |   |
|-------------------|---|
| Form:             | Liquid  |
| Colour:           | Pale Pink   |
| Specific Gravity: | 1.0   |
| Contents:         | Selected bacteria suspended in liquid stabiliser/buffer |
| Storage:          | Keep refrigerated below 4 deg C                         |
| Packaging:        | 1, 5, & 25 Litre poly packs plus 1000L IBC's            |

EU1000 reduces the levels of Ammonia by firstly oxidising it to Nitrite NO<sub>2</sub> and then Nitrate NO<sub>3</sub>

Dissolved Oxygen should be monitored after 48 hours and air flow increased if required to maintain a minimum of 2 mg/L.

If Ph levels fall below 7.0 then performance is dramatically affected as shown.

Ph can be controlled by chemicals, dilution or with the addition of a long lasting Ph buffer such as Bio- Buff.

When used as directed **EU1000** is completely safe. It is harmless to people, aquatic life and the environment, a biodegradable product for the removal of Ammonia.

