

Ammonia Guarde

The Heterothrophic Nitrification Booster

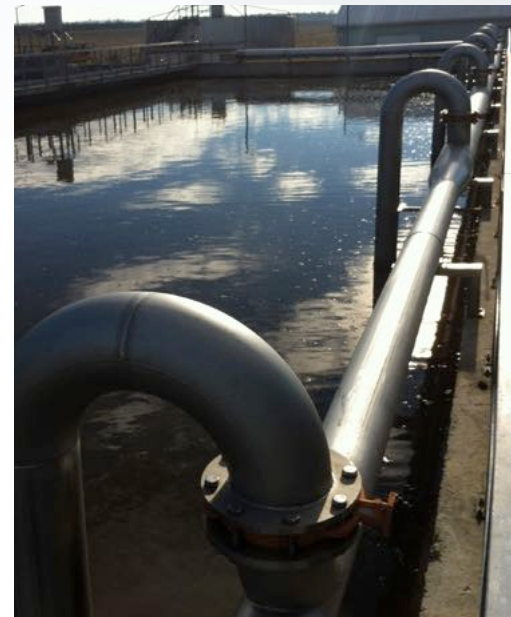
When nitrification breaks down, do not waste your time and money on introducing concentrated autotrophic species, here is your solution!



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Benefits of Ammonia Guarde bioaugmentation:

- **Significantly reduces Ammonium concentration in a short time**
- Reduces TSS (total suspended solids)
- Boosts Bio-P removal in WWTP's where Bio-P step is established
- Applicable in cold climate for boosting nitrification due to its temperature resistant heterotrophic nitrifiers
- Reduces odor caused by excess Ammonia
- Long shelf life
- Works effectively without introducing environmentally hazardous chemicals
- **Safe, and easy to incorporate into your normal treatment routine**
- **100% all-natural & biodegradable, non-GMO, non-toxic, non-hazardous product with long shelf life.**



Product description:

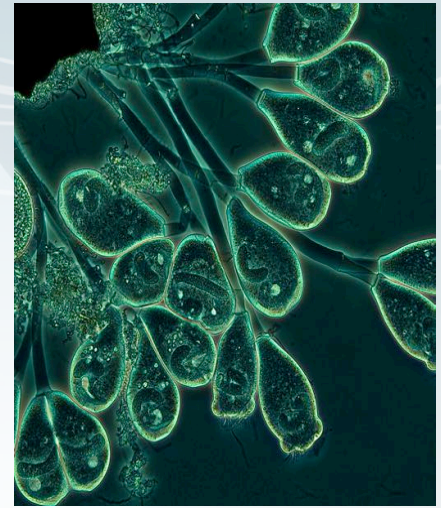
Ammonia Guarde is an all-natural product made by fermentation, a special blend of microbes that intensifies the conversion of Ammonium to Nitrate, the process known as nitrification. Ammonia Guarde is a microbial digestion system designed to remove Ammonium in wastewater treatment plants. The product contains specially selected facultative anaerobic Bacillus species combined with our Cozymase technology which significantly accelerates nitrification processes in your activated sludge, attached growth, or pond biology.

Decline of nitrification is a common problem amongst wastewater treatment plants caused by various problems:

- decrease of water temperature in winter
- overload of COD
- inhibitory or toxic substances in raw wastewater
- low DO concentration or sludge age

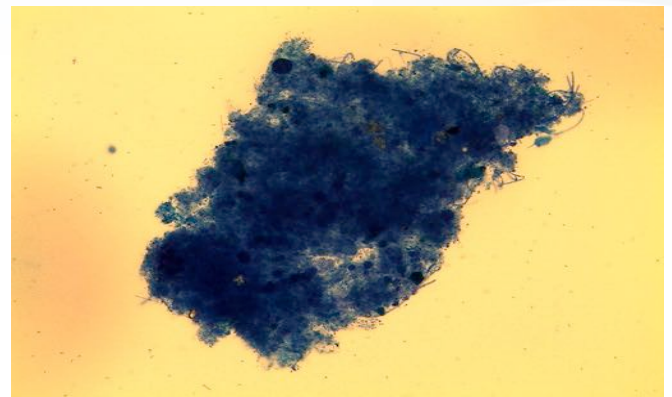
Ammonia Guard is an all-natural, fermentation-made biotechnological product that **helps intensifying the nitrification process**. The active agents of the product are highly effective **heterotrophic nitrifier** bacteria strains, present in high CFU count supported by the Cozymase system. Dosing of Ammonia Guard provides effective nitrification at wastewater treatment plants, even when water temperature is low. The product also reduces the negative impacts of shock loads, inhibitors, or Oxygen deficiency on nitrification.

Ammonia Guard is supplied as a concentrated liquid where the bacteria are inactivated. The product does not require pre-activation, simply the dilution activates the bacteria which means that **dosing is recommended by a simple low-capacity metering pump from any container**.



Fields of application:

- Industrial, and municipal **activated sludge, granular sludge, or MBBR (attached growth)** wastewater treatment plants
- Wastewater lagoons, effluent holding tanks, tertiary treatment ponds
- Livestock waste streams (lagoons, pre-treatment plants, etc.)
- Biological leachate treatment plants



Application of Ammonia Guard:

IMPORTANT INFORMATION:

Recommended daily dosages are guidelines only, given in ppm for the concentrated product, based on m³/d average hydraulic raw wastewater load!

For determining exact dosages for your WWTP, please provide us information by sending us our wastewater datasheet filled with information about your plant.

Dosage of the product is preferably automated & continuous by a metering pump. Dilution with pure water is up to operator, as well as storage tank volume. The product can be easily incorporated in your operation. Manpower is only needed for a few minutes once a week.

Whenever you have any questions, do not hesitate to contact us!

Dosage information:

Week 1: 0.7-4 ppm per day

Week 2: 0.4-2.5 ppm per day

Onwards: 0.1-1.5 ppm per day as daily maintenance dosage

Dosing location: dosing into the first biological reactor of the plant is recommended, or the product can be dosed directly into the primary treated influent wastewater before entering the first bioreactor of the system. In case of SBRs, dosage can be executed in the EQ or buffer tanks.



Packaging Information:

The product is available in 19 litre safety pails which is the lowest unit for ordering.

Storage information & shelf life:

Keep the product in a cool and dry place below 28 Celsius. Avoid exposure to direct sunlight. Shelf life is 5 years from manufacturing date.