NOVADAN®

*Innovators in Cleaning*

# NOVA OPTIMIZER

## Slurry Additive

**Beneficial to the environment**

**Improved production economy**

**Enhanced fertilizer value**

**Less nuisance odour**

- Natural slurry management product
- Used in both organic and conventional farming
- Used in slurry tanks/lagoons, slurry channels/containers, reception pits and bio-gas plants.

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# Nova Optimizer

## has very special properties

Nova Optimizer is a natural product consisting of a combination of special minerals that produce a particularly good ion exchange effect.

The special feature of the product is that it is capable of absorbing slurry and water into its structure. By this process, Nova Optimizer acts as a buffer for both slurry and water; flushing of the fertilizer is minimised, thus benefiting the groundwater.

The high ion-exchange effect also restricts airborne pollution, with vapours containing ammonia constituting a major nuisance in this regard.

The principle underlying the effectiveness of these special minerals is that negative ions are switched to positive ions. This binds the ammonia to the slurry, massively reducing the amount of ammonia vapour. The product also produces a beneficial effect in the slurry when a more homogenous mass is desired.

Nova Optimizer helps the environment, and helps the farmer financially too thanks to improved fertilizer value.

### Bio-gas use

When using slurry additive in bio-gas plants, there are some guidelines that must always be adhered to at the start, as the bacteria that develop the gas are highly sensitive to any changes. Also, it is difficult to be certain about how much sediment there is in the tank. For this reason, do not simply start by adding 20g of slurry additive per $m^3$ in the reception pit, as this could harm the bacteria and risk mixing all the sediment back into the biomass in one go. In the worst case scenario, this could reduce gas production and block the pipe systems in the plant.

### Correct start for a bio-gas plant

Start by clarifying how much biomass (i.e. slurry + industrial waste) is being added each day. Next, add 20g of slurry additive per $m^3$ of biomass added. As most bio-gas plants have a reception pit with capacity for one week's use, it may be sufficient to add slurry additive once a week; if this is not the case, however, add the product daily.

### What will happen?

After a very short agitation process, the biomass will mix better, mixing will become easier, so the bio-mass will become more homogenous; the amount of sediment in the reception pit will be reduced week by week.

### Using the product in animal housing units

When all channels and containers are completely empty of slurry, add 20 g of slurry additive per $m^3$ of slurry expected to be found by the next emptying. The product now works until the next emptying.

If slurry additive is always used in the channels and containers, there is no need to add any extra product to the slurry tank.

The product can also be mixed with water and poured over the slats each time the channels are emptied of slurry.

Each time the pigs are taken out of the housing units, the product can be dispensed directly onto the slats and rinsed down during cleaning.

**Cattle housing units**
**Pig housing units**

### Using the product in a slurry tank

Start by adding 20 g of slurry additive per $m^3$ of slurry already in the tank/lagoon and the slurry that is in the housing units.

Slurry that has had the slurry additive added must always be agitated vigorously before the slurry is spread on the fields. Failure to take this step will result in less than the maximum expected effect. It is advisable to position the slurry agitator at 4–5 different places in the tank during agitation so that all the sedi-ment is thoroughly mixed into the floating mass.

# Better returns

## in many different areas

### Benefits for bio-gas production

- Boosts gas production by up to 10%
- Easier agitation of the biomass
- Less sediment in the production tank
- Easier agitation of the reception pit and storage tanks
- Floating crust on storage tanks
- Less odour from the storage tanks
- More fertilizer available for crops

### Agricultural benefits

- Binds up to 1.2 kg NH3 per tonne of slurry
- More homogenous mass
- Floating crust on the slurry tank
- Easier handling
- Less nuisance odour – binds NH3
- Facilitates work processes
- Stir only once every 24 hours

# Added value

## to benefit the farmer


Nova Optimizer creates added value, as the odour is significantly reduced, slurry management is made easier, the crops receive more uniform fertilizer, and the farmer is able to achieve more economical production.

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