

# FARM360 (Swine & Poultry)

## 360° of Care!

### Introducing FARM360 (Swine & Poultry)

**FARM360 Spray** is a revolutionary product that breaks down organic waste and eliminates odor causing compounds at the source.

**FARM360 Spray** is highly effective in digesting waste products comprising fats, proteins, carbohydrates and cellulose, and is suitable for all manure treatment systems.

**FARM360 Spray** is particularly effective for digesting sludge, managing nutrient loads and reducing odor from manure lagoons.



Spray Gun Is Not Included

### Experience The Difference!



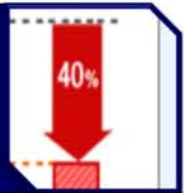
Accelerates the decomposition of organic waste (sludge)

Reduces the need for pump outs



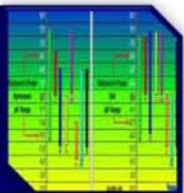
Reduces the strength of effluent (Nutrient Load)

Reduces Total Nitrogen, Phosphorus and Potassium by up to 40%



Reduces BOD & TSS by up to 80%

Improves nutrient availability when effluent is used to irrigate pasture



Removes rather than masks odors

Improves health and quality of bedding



10%+ increase in methane & 10%+ decrease in H2S from anaerobic digesters

Reduces fly numbers by removing organic attractants



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Manure Pond Treatment	Application Rate (by daily flow rate) *		Mixing (fresh or bore water)	Application
Initial Shock Dosing	Day 1: 2kg per 1ML Day 7: 1kg per 1ML Day 14: 1kg per 1ML Day 21: 1kg per 1ML			Spray to entire surface of pond.
Daily Inflow Dosing	<20,000L per day - 100g 20,000-40,000L / day - 200g 40,000-60,000L / day - 300g 80,000-100,000L / day - 400g 100,000-200,000L / day - 500g	200,000-300,000L / day - 600g 300,000-400,000L / day - 700g 400,000-500,000L / day - 800g 500,000-1,000,000L / day - 900g >1,000,000L / day - 1kg per 1ML	Mix required quantity into 100L per 100g of product.	Introduce solution into effluent flow evenly over 24 hours.

\* Increase dosage by 50% for ponds with temperatures below 10° C

Odor & Ammonia Control	Application Rate	Mixing (fresh or bore water)	Application	Re-application Frequency
Poultry Barn Bedding Material	1kg per 1,000m <sup>2</sup>	Mix 1kg into 250L.	Decant solution into spray equipment. Spray over the surface of the pen or enclosure.	Apply when bedding is first laid. Reapply every 30 days.
Layer Barn Floor Spray	1kg per 1,000m <sup>2</sup>	Mix 1kg into 250L.	Decant solution into spray equipment. Spray over entire barn floor.	Apply every 30 days.
Swine Pen & Bedding Material	1kg per 1,000m <sup>2</sup>	Mix 1kg into 250L.	Decant solution into spray equipment. Spray over entire bedding material surface.	Apply when bedding is first laid. Reapply every 30 days.
Manure Odor Control	25g per ton	Mix 1kg into 1,000L.	Decant solution into spray equipment. Spray over manure pile.	Apply when bedding is first laid. Reapply every 30 days.

Pond Surface Treatment	Application Rate (by total pond volume)*	Mixing (fresh or bore water)	Application
Surface Treatment Only	Refer Manure Pond Treatment - Shock Dosing	Mix required quantity into 1,000-10,000L.	Spray to entire surface of pond.
	Ongoing Reapply 1kg per 1 ML every 14 days		

\* Increase dosage by 50% for ponds with temperatures below 10° C

Pond Surface Treatment	Application Rate (by total pond volume)*	Mixing (fresh or bore water)	Application
Initial Treatment	Calculated on Total Volume 10g per 1,000L	Mix required quantity into 1,000L.	Introduce solution into effluent flow evenly over 24 hours.
Ongoing Daily Treatment	Calculated on Daily Inflow Day 3: 2g per 1,000L	Mix required quantity into 1,000L	Introduce solution into effluent flow evenly over 24 hours.

\* Increase dosage by 50% for ponds with temperatures below 10° C

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BNA recommends activating the product before using it as follows:

### Equipment

- 1 x 100 Liters Clean Tank
- 2 x Fish Tank Air Pumps (recommended that each is to be equipped with 2-Air Outlets).
- 1 x Fish Tank Cleaning Motors (Filters are to be completely removed).
- 1 x Temperature Gauge.
- 1 x pH Gauge.

### Procedures

- Install the Fish Tank Cleaning Motor at the bottom of the tank (make sure the filters are completely removed).
- Install the outlets of one of the Fish Tank Air Pumps at the bottom of the Water Tank.
- Fill the Water Tank with 95 Liters of Standard Tap Water.
- Keep the Fish Tank Cleaning Motors and the Fish Tank Air Pumps running for 120-minutes before applying the dose.
- After 2-hours of continuous aeration to the water; a dose of 1000grams is to be applied for every 95 Liters of Water.
- Once the dose has been applied; the second Fish Tank Air Pump is to be applied to the tank.
- After starting the 4th hour of the application of the product into the water; the pH value and the Temperature are monitored every hour.
- Once the temperature starts rising above 30 degrees Celsius; this is an indication that the solution is starting to reach the maturity time and thus both the pH and the temperature are to be monitored every 30-minutes and the later applied Air Pump is to be stopped and only the pump at the bottom is to be kept running with the cleaning motor.
- Once the pH value starts moving below 7 and/or the solution temperature starts reaching towards the 37 degrees Celsius this means that the solution is in its prime condition and is to be applied to the media subject of treatment within a maximum of 1-hour and in this case the air pump is to be stopped once any of the above conditions (pH = 6 or temperature = 37 degrees) one of the 2-outlets of the Air Pump is to be removed.
- If the solution reaches this condition and is kept unused for more than 2-hours the pH value will rise again which is an indication that some of the bacterial strains has started dying and thus the solution will lose a good portion of its efficiency.

### Special Cases

-The above referred conditions would usually take anywhere between 12-18 hours for completion of activation depending on the quality of the activating water; room temperature; and strength of the Air Pumps being used for aeration.

-If in a special case; the pre-activation is required to be completed within a very short duration; 50mL of Glucose is to be added to the solution with the water filling at the beginning stage which will bring down the activation time down to less than 3-5 hours. However, this application makes the activation procedure very aggressive and if the solution is not used quickly upon reach of the prime point we will lose multiple strains of the bacteria in the solution.